National Air Toxics Assessment (NATA): 2014 Results Summary

Briefing for Region 6

June 14, 2018

Key Messages

- NATA is a screening tool that identifies areas for further analysis
  - It does not single out one area of the country as having the highest risks
  - It uses estimates of emissions and computer models to approximate risks; it is not designed to determine actual health risks to individual people
- In the 2014 NATA results, Region 6 has 8 MSAs with cancer risks ≥ 100-in-1 million
  - Risks in all MSAs are driven by ethylene oxide emissions (except New Orleans-Metairie, which is also driven by chloroprene)
- OAR is currently discussing ways to address these risks

What is NATA?

- Screening-level characterization of air toxics across the nation
  - Nationwide assessment with census **tract** resolution (about 74,000 tracts)
  - Based on air quality modeling of emissions from: stationary, mobile, biogenic sources, and fires using the National Emissions Inventory
  - Ambient and exposure concentration estimates for 175 HAP plus diesel particulate matter (DPM)
  - Cancer and noncancer risk estimates for about 140 Clean Air Act hazardous air pollutants (HAP) with health data based on chronic exposures
- This is the 6th NATA (2014 NATA)
  - Previous assessments for inventory years 1996, 1999, 2002, 2005, 2011
- Primary NATA Uses
  - Planning tool for EPA, state/local/tribal organizations
    - To identify locations of interest for further study
    - To prioritize pollutants and emission sources/types
    - To inform monitoring programs
  - Serve partner needs by developing innovative data and communication tools

Limitations

- Emissions, modeled ambient concentrations, and estimated inhalation exposures are only from sources of outdoor origin via the inhalation route of exposure
- Results are more uncertain at finer geographic scales
  - Surrogates used to allocate mobile and nonpoint source emissions
- Results should not be used to compare risks among different areas of the country
  - Underlying emissions data vary in level of detail from state to state
- Results should not be compared among NATAs
  - Changes in results are due to actual emission changes as well as the use of different modeling and emissions processing techniques. In addition, other assessment inputs, such as meteorological data and health benchmark values, change over time.

2014 NATA Analytical Steps

Compile National Emissions Inventory (2014 NEI)

2014 NEI includes both stationary, mobile and natural sources (fires, biogenics).

NATA includes 175 HAP and diesel particulate from mobile sources.

Estimate ambient concentrations of air toxics across U.S.

Uses CMAQ and AERMOD to predict census tract ambient concentrations nationwide.

Estimate population exposures

Includes an exposure model (HAPEM7) to account for human activity data, commuting patterns, and near roadway exposures.

Characterize potential public health risks from inhalation

Census tract level cancer and noncancer risks nationwide.

Improvements & Updates for 2014

- Inventory:
  - ***Updated spatial allocation for mobile and nonpoint sources***
  - NEI improved in many areas e.g., oil & gas, onroad, nonroad, commercial marine vessels
  - Areas outside CMAQ domain (AK, HI, PR, VI) better characterized for AERMOD modeling
  - New emissions processing tool built for preparing AERMOD emissions
- Photochemical/Dispersion Modeling:
  - In CMAQ: improved boundary conditions and carbon tetrachloride treatment; nine more HAP modeled than in 2014
  - More spatially refined meteorology using prognostic meteorological modeling (WRF)
- Exposure Modeling:
  - New features of HAPEM 7, including updated population and commuting patterns, activity pattern data, and four additional commuting-related microenvironments
- Risk Characterization:
  - ***Updated health benchmarks – ethylene oxide, acrolein, benzo(a)pyrene***
- Outreach:
  - Updated Map App features
  - Potential story map

Pre-Release Results

Do not cite, quote or release

The NATA team is still performing QA/QC
of the data prior to public release

MSAs with Elevated Cancer Risks

2014 NATA Version 2

Ex. 5 Deliberative Process (DP)

MSAs with Elevated Cancer Risks

2014 NATA Version 2

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ethylene Oxide Risks

Ex. 5 Deliberative Process (DP)

- Data review activities:
  - OAQPS contacted trade associations and facilities
  - Regional staff also contacted states and facilities
  - Any revised data received to date has been incorporated into NATA or evaluated for appropriateness for inclusion

Region 6 MSAs with Elevated Cancer Risks

2014 NATA Version 2

Ex. 5 Deliberative Process (DP)

Facilities in LA w/ Elevated Risks

2014 NATA Version 2

Ex. 5 Deliberative Process (DP)

Facilities in TX/NM w/Elevated Risks

2014 NATA Version 2

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Moving Forward

- Planned Release: Mid-August 2018
- Steps Before Release:

Ex. 5 Deliberative Process (DP)

Communications and Outreach

- HQ plans to prepare general materials on NATA and ethylene oxide, including:
  - Qs & As
  - Talking Points
  - Fact Sheet(s)
- We stand ready to support the region with developing any materials specific to their states/localities, including:
  - Regional talking points
  - Draft press releases
  - Other targeted materials as needed

Appendix

Results, Outreach, and Documentation

- Tabular results by pollutant and source type:
  - Emissions (facility, grid, county level)
  - Modeled ambient concentrations (census tract, county, state, national)
    - Ex. 5 Deliberative Process (DP)
  - Exposure concentrations (census tract, county, state, national)
    - Ex. 5 Deliberative Process (DP)
  - Cancer and noncancer risk driver summaries (census tract, county, state, national)

    Ex. 5 Deliberative Process (DP)
  - Generally used by researchers, data-savvy users
- Visual display of tabular results in interactive Map App
  - Can help users identify the sources and pollutants that contribute to potential risks in their community
  - Available on tablets and smartphones
  - Often used by the press
- Webpages with methods, results, FAQs and other references
- Technical support document and related documentation

Process & S/L/T Outreach

Ex. 5 Deliberative Process (DP)

Source Attribution –Concentrations/Risks by 38 Groups

ONROAD
Light duty gas on-network
Light duty diesel on-network
Refueling
Light duty gas off-network
Light duty diesel off-network
Heavy duty gas on-network
Heavy duty diesel on-network
Heavy duty gas off-network
Heavy duty diesel off-network
Heavy duty diesel hoteling

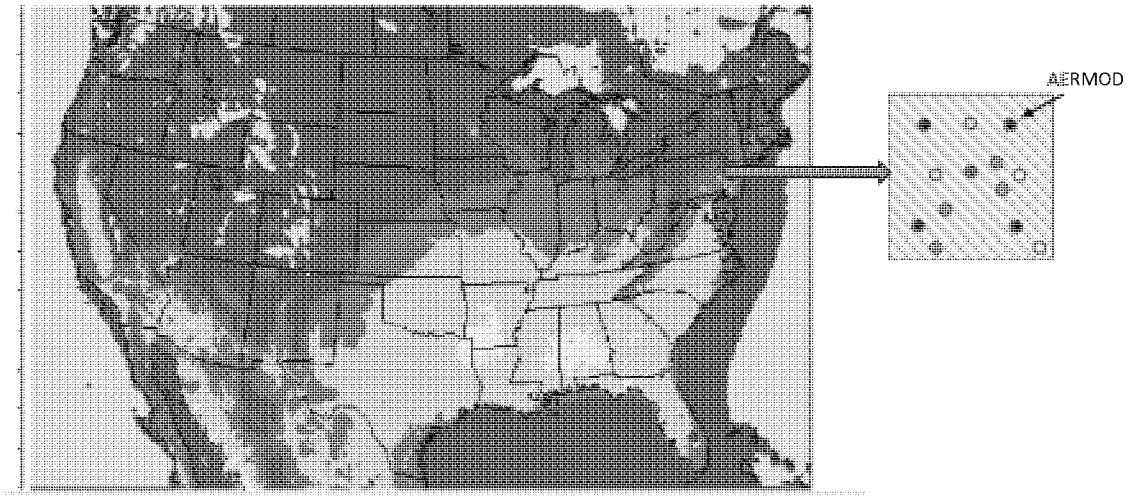
NONROAD
Recreational-inc. pleasure craft
Construction
Commercial Lawn & Garden
Residential lawn & Garden
Agricultural Equipment
Commercial Equipment
All Other Nonroad Equipment
Commercial Marine Vessels Ports C1/C2
Commercial Marine Vessels Ports C3
Commercial Marine Vessels Underway
Locomotives
Airports (point)
Railyards (point)

NONPOINT STATIONARY
Oil & Gas
Residential Wood Combustion
Miscellaneous Nonindustrial
Commercial Cooking
Solvents and Coatings
Storage and Transfer, Bulk Terminals, Stage1
Fuel Combustion except residential wood
Industrial
Waste Disposal
Agricultural livestock

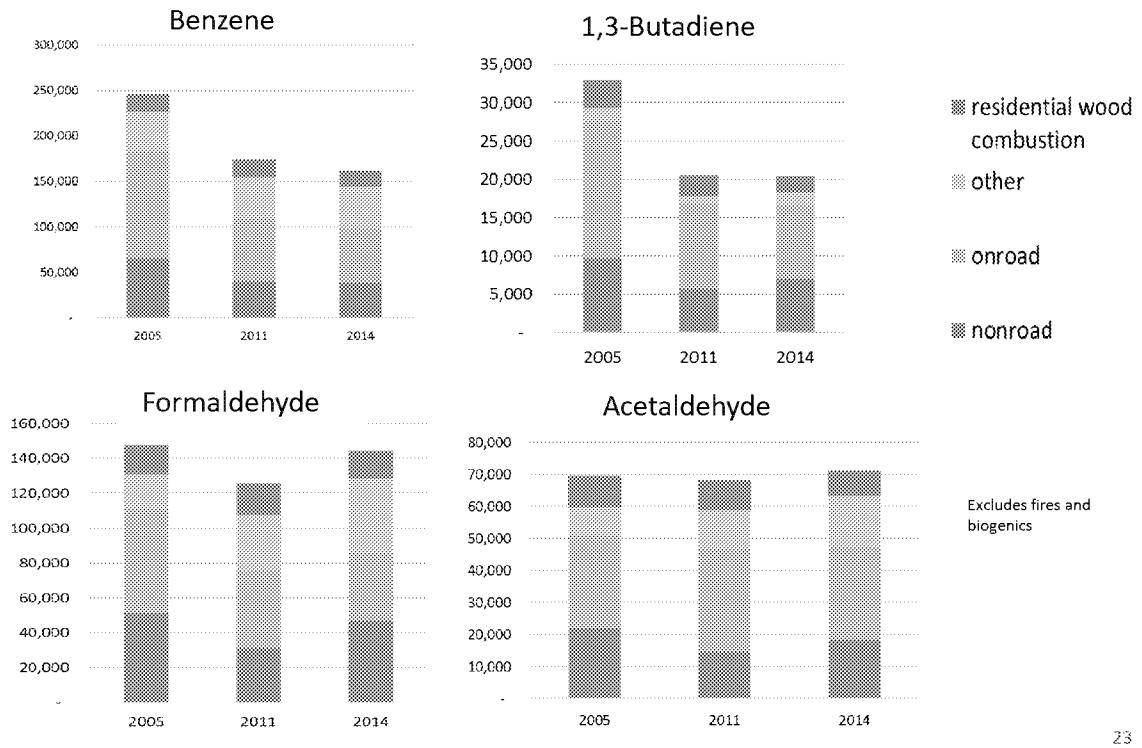
POINT
Stationary point

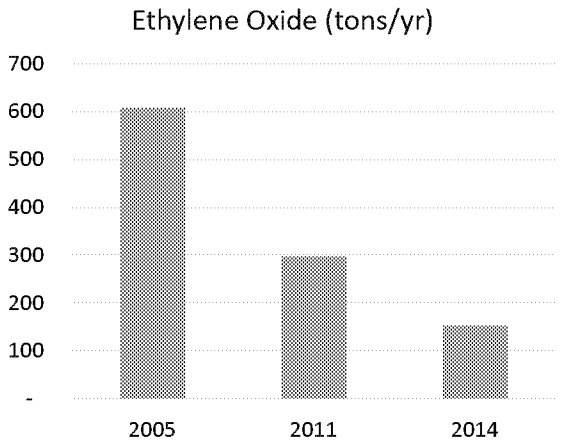
OTHER
Fires -primary*
Biogenics - primary *
Secondary formation [includes all sources]
Background
*not modeled in CMAQ

Hybrid Approach -
Combines CMAQ and AERMOD in each grid cell



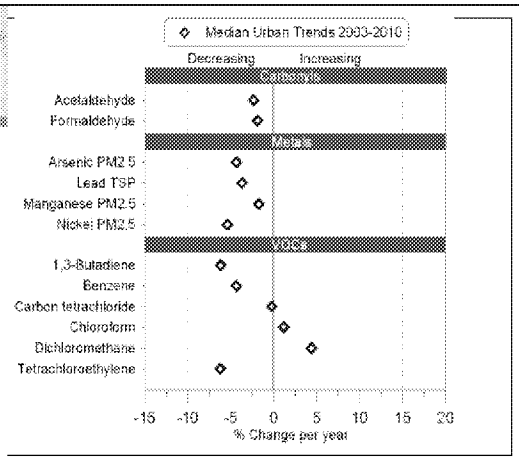
consistent MET and emissions across CMAQ and AERMOD


Benzene
300,000
250,000
200,000
150,000
100,000
50,000
-
2005
2011
2014
1,3-Butadiene
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
2005
2011
2014
residential wood combustion
other
onroad
nonroad
Formaldehyde
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-
2005
2011
2014
Acetaldehyde
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2005
2011
2014
Excludes fires and biogenics

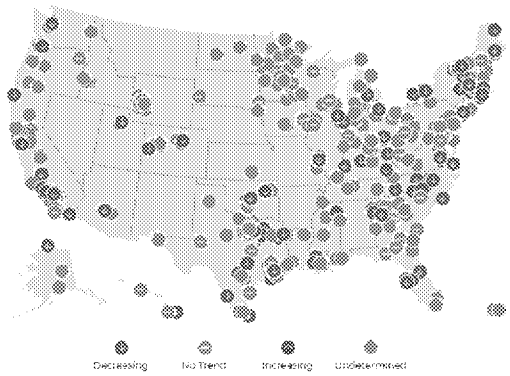

Ethylene Oxide (tons/yr)
700
600
500
400
300
200
100
-
2005
2011
2014

Can Use Monitoring Data to Assess Trends

Report to Congress – trends across urban monitors, 2003-2010

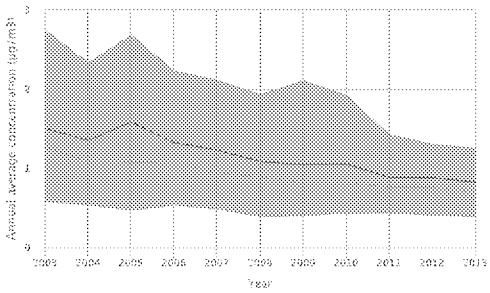


Benzene Monitors – 2003 to 2016 Concentration Trend



Report on the Environment

Exhibit 3. Ambient benzene concentrations in the U.S., 2003–2013



25

National Cancer Risk Results

- Population-weighted, national-average cancer risk estimated to be **30-in-1 million**

Ex. 5 Deliberative Process (DP)

2011 NATA Results

- National-average cancer risk: 40-in-1 million
- Ex. 5 Deliberative Process (DP)
-

- Other tract-level pollutant drivers include chloroprene, coke oven emissions, formaldehyde, chromium (VI) compounds

Ex. 5 Deliberative Process (DP)

National Average Cancer Risk

2014 NATA Version 2

(30-in-1 million)

Ex. 5 Deliberative Process (DP)

National Average Cancer Risk

2014 NATA Version 2

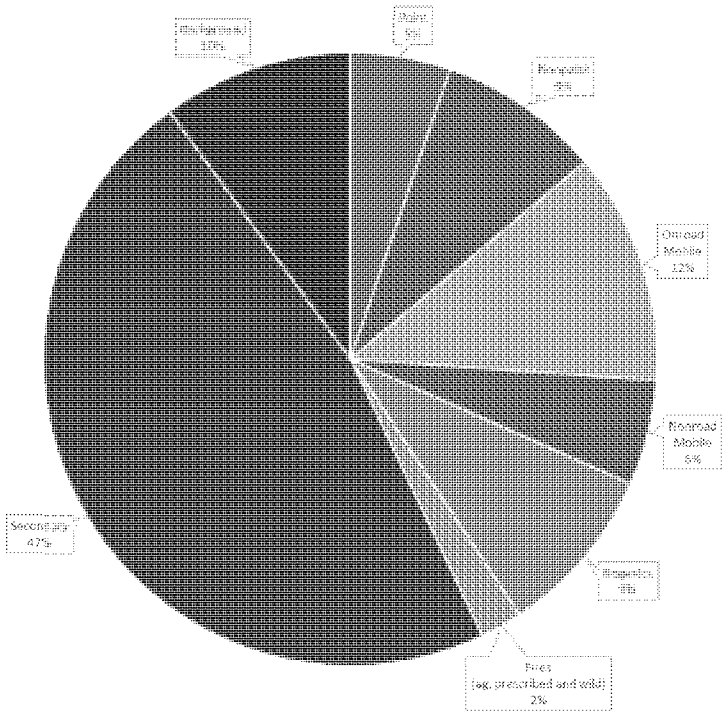
Pollutant Contributions (30-in-1 million)

Ex. 5 Deliberative Process (DP)

National Average Cancer Risk

2014 NATA Version 2

Source Contributions (30-in-1 million)



National Noncancer Risks

- Respiratory
  - National noncancer (respiratory) Hazard Index (HI) is estimated to be 0.4
    - HI is the sum of hazard quotients for individual pollutants
    - RfC > 1 indicates potential for noncancer health effects

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/30/2018 12:59:08 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Thanks.

From: Parker, Cindy
Sent: Monday, July 30, 2018 7:58 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

fyi

From: Donaldson, Guy
Sent: Monday, July 30, 2018 7:53 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

FYI,

I reached out to NMED who confirmed the reductions at sterigenics.

From: Baca, Michael, NMENV [mailto:michael.baca1@state.nm.us]
Sent: Friday, July 27, 2018 10:17 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Hi Guy,

I spoke with the permit writer and the confirmed that the facility installed new equipment in 2015. They think the emission reductions were a result of the modification to the facility.

Thanks,

Mike

From: Donaldson, Guy <Donaldson.Guy@epa.gov>
Sent: Thursday, July 26, 2018 12:39 PM
To: Baca, Michael, NMENV <michael.baca1@state.nm.us>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Michael if you get a chance can you give me a call at 214-665-7242 regarding the Sterigenics facility in Santa Theresa.

You may or may not have heard, risk numbers associated with Ethylene Oxide have changed significantly and as a result, some of the Ethylene Oxide sources are showing up now in the coming National Air Toxics assessment.

We think based on the TRI data below and some permit info as well that the Sterigenics facility has reduced its emissions significantly and I just wanted to confirm that NMED is seeing the same thing.

From: Larson, Darrin
Sent: Thursday, July 26, 2018 1:02 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Monday, July 16, 2018 12:28 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

See the data from Mort. Point source emissions did go down from 2014.

From: Wakeland, Morton
Sent: Monday, July 16, 2018 12:18 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Stuckey, Troy <Stuckey.Troy@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Good afternoon Anupa

I was out most of last week, so am just getting back to this.

If this is the correct site in NM…

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:	STERIGENICS-SANTA TERESA FACILITY	Mailing Name:	STERIGENICS-SANTA TERESA FACILITY
Address:	2400 AIRPORT RD SANTA TERESA NM 88008	Mailing Address:	2015 SPRING ROAD, SUITE 650 OAK BROOK IL 60523
County:	DONA ANA	Region:	6
Facility Information:	View Facility Information	TRI ID:	88008GRFFT2400A
DUNS Number:	361309719	FRS ID	110000472541
TRI Preferred Latitude:	31.861111	TRI Preferred Longitude:	106.6875
Public Contact:	KATHLEEN HOFFMAN	Phone:	6309281758
Assigned Public Contact:	KATHLEEN HOFFMAN		
Parent Company:	STERIGENICS US LLC	Standardized Parent Company:	STERIGENICS US LLC
BIA Tribal Code:		Tribe:	

Parent DUNS: 098499569

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2016

NAICS CODE	PRIMARY	NAICS DESCRIPTION
561910	YES	Packaging and Labeling Services

Then here are the stack (point) and fugitive emissions for ethylene oxide – I see there are no reports for 2017, is site still active?

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.

Chemical Name	Media	Unit Of Measure	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR FUG	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR STACK	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR FUG	Pounds	508	537	505	517	564	528	518	506	506	460	484	386	303	271	211	211	196	800	890	850	400	250
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR STACK	Pounds	459	466	5256	9565	11798	12540	11903	10979	14933	13562	14275	11371	6816	6481	4816	4833	4479	4520	5100	260	240	250
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR FUG	Pounds	5.6	7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR STACK	Pounds	5	8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0

If you need in an Excel worksheet vs screen shot, let me know.

Best week's wishes,
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 8:37 AM

To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Thank you.

From: Wakeland, Morton
Sent: Friday, July 13, 2018 8:06 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

am just back in Friday – out all week, may have to leave in a few…will try to get to
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Yurk, Jeffrey
Sent: Thursday, July 12, 2018 12:48 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Mort: Can you help Anupa out with ethylene oxide air emissions from TRI requested below for Sterginics in New Mexico?

Thanks,

Jeff

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 12:44 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: 2014/2016 EtO emissions from Sterginics in NM?

Hi Jeff,
Steve Thompson is asking if the EtO emissions in TRI have been reduced by 83% in 2016 vs 2014. If you send the emissions for those 2 yrs, I can do the calc.

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/30/2018 1:28:41 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: Question FW: 2014/2016 EtO emissions from Sterginics in NM?

Ok thanks, I will get started with Mort and Jeff and leave the tasking of 3 and 4 to MM for Darrin when he gets back.

From: Thompson, Steve
Sent: Monday, July 30, 2018 8:23 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: Question FW: 2014/2016 EtO emissions from Sterginics in NM?

1 and 2 should be pretty easy so I would move forward on that. I would propose that we task 6MM with 3 and 4.

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 8:14 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: Question FW: 2014/2016 EtO emissions from Sterginics in NM?

Are we supposed to confirm things with the state before providing input? This could be a potentially big task:

1. Ask Mort to give us 2014 and 2016 numbers from TRI for the facilities and ask Jeff to do the same with the emissions inventories.
2. See if those numbers match up
3. Contact the state to see if there were any permitting actions taken in that same time frame.
4. Get those permits and review to see if any emissions limits increases or capacity increases/decreases. Permit limits do not always reflect capacity changes because facilities will frequently keep the same limits while expanding capacity, or net out of changing limits by other changes.

I don't know if you want me to do all of that and when we can get permits from the state (I have been in the state databases to find stuff and it is slow going) and how long it will take if the state is not helping us by giving the relevant permits.

From: Verhalen, Frances
Sent: Monday, July 30, 2018 8:05 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Cindy and Josh, please track these updates and compile them. We will send one memo from R6 to OAQPS next week.

Darrin and Anupa, please provide any updates that you know about to Cindy and Josh by COB Wednesday, August 8.

Thank you.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)

Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Donaldson, Guy
Sent: Monday, July 30, 2018 7:53 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

FYI,

I reached out to NMED who confirmed the reductions at sterigenics.

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Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

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Importance: High

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Importance: High

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

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If this is the correct site in NM…

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:	STERIGENICS-SANTA TERESA FACILITY	Mailing Name:	STERIGENICS-SANTA TERESA FACILITY
Address:	2400 AIRPORT RD SANTA TERESA NM 88008	Mailing Address:	2015 SPRING ROAD, SUITE 650 OAK BROOK IL 60523
County:	DONA ANA	Region:	6
Facility Information:	View Facility Information	TRI ID:	88008GRFFT2400A
DUNS Number:	361309719	FRS ID	110000472541
TRI Preferred Latitude:	31.861111	TRI Preferred Longitude:	106.6875
Public Contact:	KATHLEEN HOFFMAN	Phone:	6309281758
Assigned Public Contact:	KATHLEEN HOFFMAN		
Parent Company:	STERIGENICS US LLC	Standardized Parent Company:	STERIGENICS US LLC
BIA Tribal Code:		Tribe:	

Parent DUNS: 098499569

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2016

NAICS CODE	PRIMARY	NAICS DESCRIPTION
561910	YES	Packaging and Labeling Services

Then here are the stack (point) and fugitive emissions for ethylene oxide – I see there are no reports for 2017, is site still active?

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.

Chemical Name	Media	Unit Of Measure	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR FUG	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR STACK	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR FUG	Pounds	508	537	505	517	564	528	518	506	506	460	484	386	303	271	211	211	196	800	890	880	400	250
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR STACK	Pounds	459	466	5236	9585	11798	12540	11903	10979	14933	13562	14273	11371	6816	6481	4816	4833	4479	4520	3100	260	240	250
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR FUG	Pounds	5.6	7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR STACK	Pounds	5	8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0

If you need in an Excel worksheet vs screen shot, let me know.

Best week's wishes,
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 8:37 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Thank you.

From: Wakeland, Morton
Sent: Friday, July 13, 2018 8:06 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

am just back in Friday – out all week, may have to leave in a few…will try to get to
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section

Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Yurk, Jeffrey
Sent: Thursday, July 12, 2018 12:48 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Mort: Can you help Anupa out with ethylene oxide air emissions from TRI requested below for Sterginics in New Mexico?

Thanks,

Jeff

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 12:44 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: 2014/2016 EtO emissions from Sterginics in NM?

Hi Jeff,
Steve Thompson is asking if the EtO emissions in TRI have been reduced by 83% in 2016 vs 2014. If you send the emissions for those 2 yrs, I can do the calc.

Thank you,
Anupa

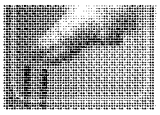
Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/30/2018 4:04:33 PM
To: Wakeland, Morton [wakeland.morton@epa.gov]
Subject: RE: Ethylene oxide TRI data

BCP may be St. Gabriel, LA

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:01 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Confirm location of #1 there are not TRI reporters in New Hampton, LA



Search Parameters:

TRI facility information searched

City Name: New Hampton

State Abbreviation: LA

Results are based on data extracted on MAR-07-2018

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:54 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Yes, both, thank you so much!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 10:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Was in a meeting just back to desk Anupa…give me a sec

I presume air stack and air fugitive releases – correct?

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:31 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: Ethylene oxide TRI data

Hi Mort,
Can I please get both the 2014 and 2016 TRI data for Ethylene Oxide the following facilities (trying to see there were any substantial increases/decreases):

1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
3. Evonik (formerly Air Products Reserve plant) – Reserve, LA
4. Taminco – St. Gabriel, LA

5. Huntsman Port Neches Plant – Port Neches, TX
6. Midwest Sterilization – Laredo, TX
7. Eastman – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/30/2018 4:38:44 PM
To: Wakeland, Morton [wakeland.morton@epa.gov]
Subject: RE: Ethylene oxide TRI data

Thank you!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:31 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Can tell you now there was no ethylene oxide reported from 2010-2016 at:

Eastman, Longview, TX
Shell Technology, Houston, TX
Sterigenics, Santa Teresa, NM

Will get others in shape.
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 11:05 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

How about Hanville, LA (I don't have very accurate info on location it seems)

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:04 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

There is no current Union Carbide reporter in Lake Charles, did they sell?

TRI Facility Report	TRI Facility ID	Facility Name	Address	County Name	LONGITUDE
TRI Facility Report	70602RCDNCI10WE	ARCADIAN FERTILIZER L.P.	I-10 W. LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.233467, -93.263086
TRI Facility Report	70602BNGLS4400L	BOEING LOUISIANA INC.	4400 LEGION ST. LAKE CHARLES, LA 706021397	CALCASIEU PARISH	30.223148, -93.156224
TRI Facility Report	70606CLCSRWESTE	CALCASIEU REFINING CO	4359 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.1338, -93.3206
TRI Facility Report	70601CRBLN900OP	CARBOLINE CO	900 OPELO US AS ST LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.24206, -93.20806
TRI Facility Report	70615GLFCS627LE	GULF COAST CHEMICAL LLC	6207 LESLIE LN LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.234301, -93.126616
TRI Facility Report	70602NDSTR5716E	INDUSTRIAL PIPE & PLASTICS INC.	5716 E. BROAD ST. LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.23019, -93.13412
TRI Facility Report	70605LKCHR3943G	LAKE CHARLES CARBON CO	4040 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.11837, -93.29295
TRI Facility Report	7060WLKCHR821HE	MARTIN OPERATING PTNR - LAKE CHARLES DOCK	3700 HENRY PUGH BLVD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.10554, -93.304878
TRI Facility Report	7061WMRTNP37BUN	MARTIN OPERATING PTNR-LAKE CHARLES	307 BUNKER RD LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.2331, -93.16344
TRI Facility Report	70605MSHPLRT14B	MESH PLASTICS LTD.	2700 MCNEESE FARM RD., FARM RD. LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.18357, -93.17675
TRI Facility Report	70615NRTHR4400L	NORTHROP GRUMMAN CORP.	4400 SEN. J. B. JOHNSTON AVE. LAKE CHARLES, LA 706155157	CALCASIEU PARISH	30.22324, -93.15612
TRI Facility Report	70616GLDLN4646H	PELICAN REFINING CO LLC	4646 LA. HWY 3059 LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.28614, -93.1448
TRI Facility Report	7060WSHWMD3191W	SHAW MODULAR SOLUTIONS	3191 W LINCOLN RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.110144, -93.276949
TRI Facility Report	70615SPRTC111JA	SPARTECH POLYCOM INC	1101 JAMES SUDDUTH PKWY LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.220303, -93.13836

Showing 1 to 14 of 14 entries Show 25 entries

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:54 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Yes, both, thank you so much!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 10:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Was in a meeting just back to desk Anupa…give me a sec

I presume air stack and air fugitive releases – correct?

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:31 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: Ethylene oxide TRI data

Hi Mort,
Can I please get both the 2014 and 2016 TRI data for Ethylene Oxide the following facilities (trying to see there were any substantial increases/decreases):

1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
3. Evonik (formerly Air Products Reserve plant) – Reserve, LA
4. Taminco – St. Gabriel, LA

5. Huntsman Port Neches Plant – Port Neches, TX
6. Midwest Sterilization – Laredo, TX
7. Eastman – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/1/2018 11:41:10 AM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: Sasol - FW: double check for LA

Yes

From: Larson, Darrin
Sent: Tuesday, July 31, 2018 1:22 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Sasol - FW: double check for LA

Is this the email that you're talking about?

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Verhalen, Frances
Sent: Tuesday, July 31, 2018 9:38 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: double check for LA

Corrected slide for the Ethylene Oxide facilities for 2014 NATA.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Smith, Darcie
Sent: Tuesday, July 31, 2018 9:25 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: double check for LA

Fyi – I made a new slide for you, just in case they get used again, although I don't think they will…

2014 NATA Version 2

Facilities in Region 6 (LA) w/ Elevated Risks

MSA Area Name (City, State)	Facility Name	Type of Facility	Potentially Applicable MACT Associated with EtO Emissions	Review
New Orleans-Metairie, LA (LaPlace, LA)*	Denka	Chemical plant	NA – P&R I	NA
New Orleans-Metairie, LA (New Hampton, LA)	BCP Ingredients	Chemical plant	NA – area	Facility - no changes
New Orleans-Metairie, LA (Hahnville, LA)	Union Carbide St. Charles	Chemical plant	HON	Facility – emissions changes for a flare
New Orleans-Metairie, LA (Reserve)	Air Products Reserve Plant (Evonik)	Chemical plant	NA – area	LA DEQ - no changes
Lake Charles, LA (Westlake)	Sasol Chemicals (USA) LLC – Lake Charles Chemical Complex	Chemical plant	HON	Corporate – no changes
Baton Rouge, LA (St. Gabriel, LA)	Taminco – St Gabriel Plant	Chemical plant	NA – area	LA DEQ - no changes

* For the LaPlace, LA area the primary risks are driven by emissions of chloroprene.

9

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Smith, Darcie
Sent: Monday, July 30, 2018 1:49 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: double check for LA

Fyi

Josh – you were right, see Ted's note below.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Palma, Ted
Sent: Monday, July 30, 2018 1:47 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: double check for LA

The facility that is driving the 2 census tracts in Lake Charles LA is 8468011 Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex Louisiana Westlake 2201 Old Spanish Trail

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Smith, Darcie
Sent: Friday, July 27, 2018 2:54 PM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: double check for LA

Hi Ted –

I have two questions for you.

First, can you please double check for me the name of the facility in the Lake Charles, LA MSA area that is driving the EtO risk?

Secondly, there is a facility – 5287111 – in Reserve, LA (which is in St. Charles Parish), the Air Products Performance Manufacturing Inc Reserve Plant. Can you please let me know what its tract risk is?

It is possible that I mixed up the two and it is possible that we left one off the list. I'm trying to help Fran figure out which is right.

Thanks!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/1/2018 2:26:40 PM
To: Yurk, Jeffrey [yurk.jeffrey@epa.gov]
Subject: FW: Can I pls get the 2014 and 2106 EtO EI data

Jeff,

Midwest sterilization is not on the 2016 data ? Is that correct?

From: Ahuja, Anupa
Sent: Tuesday, July 31, 2018 6:43 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: RE: Can I pls get the 2014 and 2106 EtO EI data

Thanks!

From: Yurk, Jeffrey
Sent: Monday, July 30, 2018 3:40 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Can I pls get the 2014 and 2106 EtO EI data

Attached are all EtO EI data from all sources in TX and LA for 2014 and 2016

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 9:59 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: Can I pls get the 2014 and 2106 EtO EI data

Hi Jeff,
Can I please get both the 2014 and 2016 EI data for EtO the following facilities (trying to see there were any substantial increases/decreases):

1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
3. Evonik (formerly Air Products Reserve plant) – Reserve, LA
4. Taminco – St. Gabriel, LA

5. Huntsman Port Neches Plant – Port Neches, TX
6. Midwest Sterilization – Laredo, TX
7. Texas Operations? I don't know the real name here – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/2/2018 5:12:46 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: increase in EtO emissions of 17 tons

1. TRI 2016 = 77248 lb/yr = 38 tons
2. I don't know what the allowable are because I don't have the permits (I just have the one minor source one);
3. EI 2016 = 28 tons

From: Thompson, Steve
Sent: Thursday, August 02, 2018 11:51 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: Fwd: increase in EtO emissions of 17 tons

For huntsman port neches, what were the emissions modeled for the NATA versus the 2016 TRI vs the permit allowables in the most recent TCEQ permit?

Sent from my iPhone

Begin forwarded message:

> **From:** "Ahuja, Anupa" <ahuja.anupa@epa.gov>
> **Date:** July 25, 2018 at 6:50:40 AM CDT
> **To:** "Larson, Darrin" <Larson.Darrin@epa.gov>, "Thompson, Steve" <thompson.steve@epa.gov>
> **Subject: FW: increase in EtO emissions of 17 tons**
>
> FYI.
>
> ---
>
> **From:** Smith, Darcie
> **Sent:** Tuesday, July 24, 2018 5:41 PM
> **To:** Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
> **Cc:** Strum, Madeleine <Strum.Madeleine@epa.gov>
> **Subject:** RE: increase in EtO emissions of 17 tons
>
> Hi Anupa –
>
> I'm copying Madeleine on this since she is involved in a lot of the emissions related review as well.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks for bringing these points up Anupa. I think you're a few steps ahead of NATA and into the further investigation step of the process, which is great! As we continue moving forward, I'm sure we'll have more questions for you about the situations you've mentioned.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 11:00 AM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: increase in EtO emissions of 17 tons

Hi, I wasn't sure who I should send this to so I included you both.

On the R6 ppt slides for today's call, I noticed that for the Port Neches, tx plant the review column says "no changes" and under review it says "TCEQ – no changes". For the Santa Teresa NM plant, the review column says "emissions decreased."

I have reviewed the TRI data for both plants and:

1)

2)

Ex. 5 Deliberative Process (DP)

I am concerned that Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Anupa

From: Caparoso, Jennifer
Sent: Tuesday, July 24, 2018 6:25 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Emissions data

Hi Anupa,

While not reflected in NATA, we received additional information from the Union Carbide St. Charles Facility that we are still evaluating and discussing with the facility. When we complete our analysis, if there are any changes, we will share them with you. We have not received any other emissions changes.

Jennifer Caparoso, P.E.
CDR, USPHS
Refining and Chemicals Group
SPPD/OAQPS
U.S. Environmental Protection Agency
Mail Code: E143-01
Research Triangle Park, NC 27711
(919) 541-4063

From: Ahuja, Anupa
Sent: Thursday, July 19, 2018 11:10 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Ok thanks Darcie.

From: Smith, Darcie
Sent: Thursday, July 19, 2018 10:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Hi Anupa –

Thanks for your question. You're right, we have spoken with our AA, but the conversation is not yet over…

Regarding the emissions, as I shared with you previously, there are no new emissions, with the exception of a minor one (20 lbs out of 7 tons) for Texas Operations in Longview TX and possibly some updated emissions from Union Carbide St. Charles. We've been expecting some, so I've copied Jennifer Caparoso on this because if we have received new emissions for that facility, she will have them.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076

smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, July 18, 2018 11:32 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Emissions data

Hi Darcie,
Now that the Wehrum briefing is done, my management is asking if it would be possible for us to get the updated emissions data for the 9 facilities in R6? We have the 2014 emissions inventory data, but we would like to get the updates to the emissions that may have been provided by the companies.

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/2/2018 6:10:05 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: increase in EtO emissions of 17 tons

The latest slide says 10.8 tons.

From: Thompson, Steve
Sent: Thursday, August 02, 2018 12:52 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: Re: increase in EtO emissions of 17 tons

Thanks. What was modeled in 2014 NATA?

Sent from my iPhone

On Aug 2, 2018, at 12:12 PM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:

1. TRI 2016 = 77248 lb/yr = 38 tons

2. I don't know what the allowable are because I don't have the permits (I just have the one minor source one);

3. EI 2016 = 28 tons

From: Thompson, Steve
Sent: Thursday, August 02, 2018 11:51 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: Fwd: increase in EtO emissions of 17 tons

For huntsman port neches, what were the emissions modeled for the NATA versus the 2016 TRI vs the permit allowables in the most recent TCEQ permit?

Sent from my iPhone

Begin forwarded message:

From: "Ahuja, Anupa" <ahuja.anupa@epa.gov>
Date: July 25, 2018 at 6:50:40 AM CDT
To: "Larson, Darrin" <Larson.Darrin@epa.gov>, "Thompson, Steve" <thompson.steve@epa.gov>
Subject: FW: increase in EtO emissions of 17 tons

FYI.

From: Smith, Darcie
Sent: Tuesday, July 24, 2018 5:41 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: increase in EtO emissions of 17 tons

Hi Anupa –

I'm copying Madeleine on this since she is involved in a lot of the emissions related review as well.

Ex. 5 Deliberative Process (DP)

Thanks for bringing these points up Anupa. I think you're a few steps ahead of NATA and into the further investigation step of the process, which is great! As we continue moving forward, I'm sure we'll have more questions for you about the situations you've mentioned.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
<image001.png> 919.541.2076
<image002.png>smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 11:00 AM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: increase in EtO emissions of 17 tons

Hi, I wasn't sure who I should send this to so I included you both.

On the R6 ppt slides for today's call, I noticed that for the Port Neches, tx plant the review column says "no changes" and under review it says "TCEQ – no changes". For the Santa Teresa NM plant, the review column says "emissions decreased."

I have reviewed the TRI data for both plants and:

Ex. 5 Deliberative Process (DP)

I am concerned that Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Anupa

From: Caparoso, Jennifer
Sent: Tuesday, July 24, 2018 6:25 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Emissions data

Hi Anupa,

While not reflected in NATA, we received additional information from the Union Carbide St. Charles Facility that we are still evaluating and discussing with the facility. When we complete our analysis, if there are any changes, we will share them with you. We have not received any other emissions changes.

Jennifer Caparoso, P.E.
CDR, USPHS
Refining and Chemicals Group
SPPD/OAQPS
U.S. Environmental Protection Agency
Mail Code: E143-01
Research Triangle Park, NC 27711
(919) 541-4063

From: Ahuja, Anupa
Sent: Thursday, July 19, 2018 11:10 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Ok thanks Darcie.

From: Smith, Darcie
Sent: Thursday, July 19, 2018 10:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Hi Anupa –

Thanks for your question. You're right, we have spoken with our AA, but the conversation is not yet over…

Regarding the emissions, as I shared with you previously, there are no new emissions, with the exception of a minor one (20 lbs out of 7 tons) for Texas Operations in Longview TX and possibly some updated emissions from Union Carbide St. Charles. We've been expecting some, so I've copied Jennifer Caparoso on this because if we have received new emissions for that facility, she will have them.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
<image001.png> 919.541.2076
<image002.png>smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, July 18, 2018 11:32 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Emissions data

Hi Darcie,
Now that the Wehrum briefing is done, my management is asking if it would be possible for us to get the updated emissions data for the 9 facilities in R6? We have the 2014 emissions inventory data, but we would like to get the updates to the emissions that may have been provided by the companies.

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/2/2018 6:10:25 PM
To: Madden, Joshua [madden.joshua@epa.gov]
CC: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: Question FW: Quick EtO update from OAQPS

Ok thank you!

From: Madden, Joshua
Sent: Thursday, August 02, 2018 1:05 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Question FW: Quick EtO update from OAQPS

Not that it's a big deal, but just heard back from Darcie and she said that Sasol's risk number is around 132 at the tract level. It's kind of like splitting hairs over the number I gave you, but I wanted to make sure that you are kept in the loop with the best available information at the time.

Josh

From: Ahuja, Anupa
Sent: Thursday, August 02, 2018 12:13 PM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Question FW: Quick EtO update from OAQPS

Thank you.

From: Madden, Joshua
Sent: Thursday, August 02, 2018 11:25 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Question FW: Quick EtO update from OAQPS

I have a risk number of 105, but that is an older number. Fran is double checking with Darcie to see if that number is the most up to date.

From: Ahuja, Anupa
Sent: Thursday, August 02, 2018 10:44 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Question FW: Quick EtO update from OAQPS

Ok thanks – do you know what the risk number is for that Sasol?

From: Madden, Joshua
Sent: Thursday, August 02, 2018 10:28 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: Question FW: Quick EtO update from OAQPS

Off the top of my head I would say it may just be an over sight. Maybe they don't have final numbers for some facilities. But yes you are correct Sasol is back on the list.

From: Ahuja, Anupa
Sent: Thursday, August 02, 2018 10:21 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: Question FW: Quick EtO update from OAQPS

Did you guys notice that on Table 3, Sasol doesn't have any risk number? Do you know what that means? I thought Sasol was supposed to be back on the list?

From: Smith, Darcie
Sent: Wednesday, August 01, 2018 2:58 PM
To: Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Bollweg, George <bollweg.george@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Glass, Geoffrey <GLASS.GEOFFREY@EPA.GOV>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Owens, Katharine <Owens.Katharine@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Stone, William <stone.william@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Shappley, Ned <Shappley.Ned@epa.gov>; Matichuk, Rebecca <Matichuk.Rebecca@epa.gov>
Subject: RE: Quick EtO update from OAQPS

As discussed yesterday, these are the tables that went to the ADDs for their meeting Monday.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

-----Original Appointment-----
From: Sieffert, Margaret
Sent: Wednesday, August 01, 2018 2:23 PM
To: Sieffert, Margaret; Bellizzi, Carol; Ahuja, Anupa; Bollweg, George; Bremer, Kristen; Cain, Alexis; Casso, Ruben; Davidson, Ken; Doolan, Stephanie; Fry, Jessica; Glass, Geoffrey; Gross-Davis, CarolAnn; Jackson, Scott; Lancey, Susan; Larson, Darrin; Louis, Egide; Madden, Joshua; McCrowey, Clinton; Merrill, Raymond; Morris, Mark; Olson, Kyle; Owens, Katharine; Palma, Ted; Parker, Cindy; Rimer, Kelly; Shelow, David; Smith, Darcie; Stone, William; Strum, Madeleine; Twickler, Donna; Verhalen, Frances
Cc: Shappley, Ned; Matichuk, Rebecca
Subject: Quick EtO update from OAQPS
When: Wednesday, August 01, 2018 3:00 PM-3:30 PM (UTC-06:00) Central Time (US & Canada).
Where:

Sorry for the short notice. Darcie asked Carol B. or I to set up this quick meeting to give the group and update. I offered to set it up. Depending on the regional roll call, Carol or I will try to set up another call for tomorrow morning. If only one or two are missing we can catch those regions up separately.

(202) 991-0477, Code – 3174209

-Margaret

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/2/2018 6:52:07 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: 2014 NATA short term facility action

The current modeling has Union Carbide as the highest major source and their emissions that were modeled were 15 tons.

Can I see the attachment that went with this? The short term action facilities?

From: Thompson, Steve
Sent: Thursday, August 02, 2018 1:21 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Fwd: 2014 NATA short term facility action

FYI

Sent from my iPhone

Begin forwarded message:

> **From:** "Thompson, Steve" <thompson.steve@epa.gov>
> **Date:** August 2, 2018 at 1:19:04 PM CDT
> **To:** "Stenger, Wren" <stenger.wren@epa.gov>
> **Cc:** "Seager, Cheryl" <Seager.Cheryl@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>
> **Subject: Re: 2014 NATA short term facility action**
>
> Thanks Wren.
>
> One addition would be to also add Port Neches, TX (Huntsman Port Neches) as a focus area.
>
> Based upon the most recent emissions reporting for the facility (TRI), the emissions of ethylene oxide from this facility could currently be as high as 38 tpy. This would make this the largest source in the Region and would definitely significantly increase modeling risks. The 2014 NATA emissions that were modeled for the facility were 10.8 tpy.
>
> Thanks,
> Steve
>
> Sent from my iPhone
>
> On Aug 2, 2018, at 11:46 AM, Stenger, Wren <stenger.wren@epa.gov> wrote:
>
> > Here is the draft for our short term facilities action. I will share with David at 1 pm. See if we got everything covered to your satisfaction. Included state coord and we may have more facilities in the short term after coord with state.

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

<2014 NATA R6 short-term action recommendation Aug 2 2018.docx>

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/6/2018 5:14:02 PM
To: Wakeland, Morton [wakeland.morton@epa.gov]
Subject: RE: Union Carbide plotted - Mort

Thanks Mort. Yes, I am involved that EtO NATA workgroup. The list you had helped me with are the facilities that are contributing to over 100 in a million. I don't know why they are looking at the Grand Prairie facility since that did not make the cut off.

From: Wakeland, Morton
Sent: Monday, August 06, 2018 11:26 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Union Carbide plotted - Mort

HQ's identified these facilities in Region 6 with ethylene oxide issues with releases

thought you'd wanna know, I'll be contacting and asking about the up's and downs of EO releases.

Mort

E	F	G	H	I	J	K	L	M	N	O
TRIID	Facility Name	Street	City	State Abbr	Region	Chemical	2015 Air Release	2016 Air Release	2017 Air Release	Technical Contact Name
70057NNCRBHWY31	ST CHARLES OPERATIONS (TAFT/STAR) UNION CARBIDE CORP	355 LA HWY 3142 (GATE 1)	HAHNVILLE	LA	6	Ethylene oxide	27,797	35,858	14,400	RANDY RIDDICK
77651TXCCHHWY36	HUNTSMAN PETROCHEMICAL LLC PORT NECHES FACILITY	6001 HWY 366	PORT NECHES	TX	6	Ethylene oxide	45,784	77,248	40,609	TODD MCLANE
75050BSNCX132AV	STERIGENICS US LLC-GRAND PRAIRIE TEXAS FACILITY	1302 AVE T	GRAND PRAIRIE	TX	6	Ethylene oxide	347	360	0	SUSAN REINHARDT
88008GRFFT2400A	STERIGENICS-SANTA TERESA FACILITY	2400 AIRPORT RD	SANTA TERESA	NM	6	Ethylene oxide	1,003	967	0	LAURA HARTMAN

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 1:02 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Union Carbide plotted - Mort

Thank you!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 12:51 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Union Carbide plotted - Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 12:30 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

Yes, I think you are right – that is the one

From: Wakeland, Morton
Sent: Monday, July 30, 2018 12:29 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

you bet – graphs are easier to see than a list of numbers….hope they are useful…

Let me know about union carbide….wait here is a list of all Union Carbides in LA

Hey I think it's the spelling

TRI FACILITY REPORT	TRI FACILITY ID	FACILITY NAME	ADDRESS	COUNTY NAME	LATITUDE LONGITUDE	TOTAL FORMS
TRI Facility Report	70079CYPRS901PR	CYPRESS POLYPROPYLENE PLANT UNION CARBIDE CORP.	901 PROSPECT AVE PO BOX 518 NORCO, LA 70079	ST CHARLES PARISH	30.003106, -90.393377	34
TRI Facility Report	70057NNCRBHWY31	ST CHARLES OPERATIONS (TAFT/STAR) UNION CARBIDE CORP	355 LA HWY 3142 (GATE 1) HAHNVILLE, LA 70057	ST CHARLES PARISH	29.987341, -90.445067	1557

Showing 1 to 2 of 2 entries Show 10 entries

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 12:25 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

Thanks so much Mort!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 12:18 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Graphs are super pretty, but they do show the relationship from year to year.

Best,
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 11:39 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Let me look into this one. Those are the 2 cities mentioned in various briefings.

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:29 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Is that the way you spell city?

Zero TRI's

Search Parameters:
TRI facility information searched
City Name: Hanville
State Abbreviation: LA

Results are based on data extracted on MAR-07-2018

No Results found.

Total Number of Facilities Retrieved: 0

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 11:05 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

How about Hanville, LA (I don't have very accurate info on location it seems)

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:04 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

There is no current Union Carbide reporter in Lake Charles, did they sell?

TRI Facility Report	TRI Facility ID	Facility Name	Address	County Name	LONGITUDE
TRI Facility Report	70602RCDNCI10WE	ARCADIAN FERTILIZER L.P.	I-10 W. LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.233467, -93.263086
TRI Facility Report	70602BNGLS4400L	BOEING LOUISIANA INC.	4400 LEGION ST. LAKE CHARLES, LA 706021397	CALCASIEU PARISH	30.223148, -93.156224
TRI Facility Report	70606CLCSRWESTE	CALCASIEU REFINING CO	4359 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.1338, -93.3206
TRI Facility Report	70601CRBLN900OP	CARBOLINE CO	900 OPELO US AS ST LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.24206, -93.20806
TRI Facility Report	70615GLFCS627LE	GULF COAST CHEMICAL LLC	6207 LESLIE LN LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.234301, -93.126616
TRI Facility Report	70602NDSTR5716E	INDUSTRIAL PIPE & PLASTICS INC.	5716 E. BROAD ST. LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.23019, -93.13412
TRI Facility Report	70605LKCHR3943G	LAKE CHARLES CARBON CO	4040 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.11837, -93.29295
TRI Facility Report	7060WLKCHR821HE	MARTIN OPERATING PTNR - LAKE CHARLES DOCK	3700 HENRY PUGH BLVD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.10554, -93.304878
TRI Facility Report	7061WMRTNP37BUN	MARTIN OPERATING PTNR-LAKE CHARLES	307 BUNKER RD LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.2331, -93.16344
TRI Facility Report	70605MSHPLRT14B	MESH PLASTICS LTD.	2700 MCNEESE FARM RD., FARM RD. LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.18357, -93.17875
TRI Facility Report	70615NRTHR4400L	NORTHROP GRUMMAN CORP.	4400 SEN. J. B. JOHNSTON AVE. LAKE CHARLES, LA 706155157	CALCASIEU PARISH	30.22324, -93.15612
TRI Facility Report	70616GLDLN4646H	PELICAN REFINING CO LLC	4646 LA. HWY 3059 LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.28614, -93.1448
TRI Facility Report	7060WSHWMD3191W	SHAW MODULAR SOLUTIONS	3191 W LINCOLN RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.110144, -93.276949
TRI Facility Report	70615SPRTC111JA	SPARTECH POLYCOM INC	1101 JAMES SUDDUTH PKWY LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.220303, -93.13836

Showing 1 to 14 of 14 entries Show 25 entries

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:54 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Yes, both, thank you so much!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 10:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Was in a meeting just back to desk Anupa…give me a sec

I presume air stack and air fugitive releases – correct?

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:31 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: Ethylene oxide TRI data

Hi Mort,
Can I please get both the 2014 and 2016 TRI data for Ethylene Oxide the following facilities (trying to see there were any substantial increases/decreases):

1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
3. Evonik (formerly Air Products Reserve plant) – Reserve, LA
4. Taminco – St. Gabriel, LA

5. Huntsman Port Neches Plant – Port Neches, TX
6. Midwest Sterilization – Laredo, TX
7. Eastman – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 5/9/2018 5:34:05 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: EtO updates - can you get back to me today?
Attachments: AA-update_ Ethylene Oxide NATA V2.xlsx

Here you go. I added stuff in column S.

From: Larson, Darrin
Sent: Wednesday, May 09, 2018 11:37 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: EtO updates - can you get back to me today?

Hi Anupa,

Can you add notes to this spreadsheet to capture the status of the facilities you reached out to? New numbers and anything else worth noting. I know BCP said no change, and that AkzoNobel gave you lower numbers, so please add this and any other info. to the last column of the spreadsheet.

April Baiamonte from LDEQ is here at the workshop, so if you can update the spreadsheet today, that would be helpful.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 8/20/2018 12:03:54 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
CC: Thompson, Steve [thompson.steve@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Yurk, Jeffrey [yurk.jeffrey@epa.gov]
Subject: RE: Helping the states get their NATA preview info.
Attachments: NATA 5 LA facilities.xlsx

Didn't the presentation say that they will be rolling out a new website with the results? I am a very average user of excel.

As far emissions by emission unit, this is info is in the state EI databases. See the attached spreadsheet for LA that I got by selecting the high risk facilities from the EIs that Jeff sent me. They also have the permit number and emission point number listed.

From: Larson, Darrin
Sent: Thursday, August 16, 2018 6:24 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Thompson, Steve <thompson.steve@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: Helping the states get their NATA preview info.

Since the states will have a very short window of time to preview the NATA info., Steve thought it would be a good idea to have us help them find what they need on the SharePoint site that is being opened up to them today. There's a lot of content on the site, and it can be difficult to find key information. We'd like have R6 staff (Anupa and hopefully Josh and Cindy) extract information from the site that we can share with LA, TX, and NM. It might also be helpful for someone to call Darcie and ask her for some guidance.

It might be good to bring in other people if we need more help from power Excel users. I'm an average user, and I found it difficult to find key information. For example, when I was looking at the risk file by pollutant spreadsheet and wanted to see the tracts in our states with the highest EtO risks, I had to filter out the other states, the other pollutants, and the counties that had low risk (since all counties seem to be included). I'll admit I'm not a power Excel user, but I'm wondering if even a power user could find key information without a lot of effort.

What I think the states will want is the kind of information we've had in the V2 spreadsheet: facility-specific emissions and risk numbers, and ideally in greater detail than we've had so far (such as by emission unit at the facility). In my quick look at the SharePoint site, I didn't see any facility names—just tract risk.

Let us know what you think. Anupa is out on Friday, so if Josh or Cindy can start on this, that would be great. I'm also copying Jeff Yurk on this in case he can help us on this.

Here's the link to the SharePoint site:
https://usepa.sharepoint.com/sites/oar_Work/nata_preview/SitePages/2014%20NATA%20Preview%20Files.aspx

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Thursday, August 16, 2018 4:32 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: NATA Preview SharePoint site - are there two?

Yes, it is the same and yes you can share. Announcement – with link – should be coming this afternoon.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Larson, Darrin
Sent: Thursday, August 16, 2018 5:29 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: NATA Preview SharePoint site - are there two?

Hi Darcie,

Are the states being given access to the same NATA Preview SharePoint site we've been using? Just want to make sure that we can share with them what's on the site if they have trouble downloading it.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 5/15/2018 7:12:27 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: EtO spreadsheet for LDEQ
Attachments: EtO spreadsheet for LDEQ all points.xlsx

When I went back through my files, I remembered that I had already created a spreadsheet for myself that was an amalgam of several spreadsheet and contains the emission point IDs as well as the permit numbers. When I check it against the V2 spreadsheet you said had the 8 facilities, I noticed that my version (which is based on several of Jeff Yurk's spreadsheets) lists Shell Chemical in Geismar while the V2 version lists BASF in Geismar. Maybe the V2 has been updated with current owner/operator. I called Darcie to ask which the correct owner operator and left her a message. But the permit numbers should be still be right as the facility would only apply for a name change to the state. But I wanted to point that out.

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 5/17/2018 1:34:36 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: EtO spreadsheet for LDEQ
Attachments: EtO spreadsheet for LDEQ all points.xlsx

I have included BASF along with a note explaining that the difference between it and the other facilities so that LDEQ is clear on the ones that may be presented publically.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 7:55 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: EtO spreadsheet for LDEQ

For now, we should include all the facilities on V2.

Sent from my iPhone

On May 17, 2018, at 7:24 AM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:

> Before I add it, should we discuss that we now want to go down to the block level on risk? Would that add any additional facilities besides BASF in LA?
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Wednesday, May 16, 2018 2:29 PM
> **To:** Ahuja, Anupa <ahuja.anupa@epa.gov>
> **Subject:** FW: EtO spreadsheet for LDEQ
>
> You can use this to come up with a revised spreadsheet that include both Geismar facilities.
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Yurk, Jeffrey
> **Sent:** Wednesday, May 16, 2018 12:30 PM
> **To:** Larson, Darrin <Larson.Darrin@epa.gov>
> **Subject:** RE: EtO spreadsheet for LDEQ
>
> Here's 2014
>
> Attached is the 2014 ethylene Oxide Inventory for Louisiana. The AI# is in column B and the permit number is in column R.

From: Larson, Darrin
Sent: Tuesday, May 15, 2018 3:04 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: FW: EtO spreadsheet for LDEQ

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Tuesday, May 15, 2018 2:12 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: EtO spreadsheet for LDEQ

When I went back through my files, I remembered that I had already created a spreadsheet for myself that was an amalgam of several spreadsheet and contains the emission point IDs as well as the permit numbers. When I check it against the V2 spreadsheet you said had the 8 facilities, I noticed that my version (which is based on several of Jeff Yurk's spreadsheets) lists Shell Chemical in Geismar while the V2 version lists BASF in Geismar. Maybe the V2 has been updated with current owner/operator. I called Darcie to ask which the correct owner operator and left her a message. But the permit numbers should be still be right as the facility would only apply for a name change to the state. But I wanted to point that out.

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 5/17/2018 3:33:21 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: revised EtO spreadsheet for LDEQ
Attachments: EtO spreadsheet for LDEQ all points.xlsx

Ok here it is.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 10:32 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

Eventually yes, but blocks inform tracts and OAQPS hasn't finalized the tracts yet.

If you can remove that text and re-send to me to share w/ LDEQ, that would be great.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, May 17, 2018 9:04 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

I thought the point was the difference in tract vs block.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 8:52 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

I think we should leave off that notation. The V2 list doesn't include Tract level V2 risk numbers, only Tract level V1 risk numbers, because OAQPS won't recalculate Tract level risk numbers until they get back changes during this round. The agency doesn't actually know which facilities will be at 100 in million or higher yet. Also, the V1 Tract level risk numbers in the V2 spreadsheet currently show Shell Geismar, BASF Geismar, Sasol, and Dow with numbers below 100.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, May 17, 2018 8:35 AM

To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

I have included BASF along with a note explaining that the difference between it and the other facilities so that LDEQ is clear on the ones that may be presented publically.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 7:55 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: EtO spreadsheet for LDEQ

For now, we should include all the facilities on V2.

Sent from my iPhone

On May 17, 2018, at 7:24 AM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:

> Before I add it, should we discuss that we now want to go down to the block level on risk? Would that add any additional facilities besides BASF in LA?
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Wednesday, May 16, 2018 2:29 PM
> **To:** Ahuja, Anupa <ahuja.anupa@epa.gov>
> **Subject:** FW: EtO spreadsheet for LDEQ
>
> You can use this to come up with a revised spreadsheet that include both Geismar facilities.
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Yurk, Jeffrey
> **Sent:** Wednesday, May 16, 2018 12:30 PM
> **To:** Larson, Darrin <Larson.Darrin@epa.gov>
> **Subject:** RE: EtO spreadsheet for LDEQ
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> Here's 2014
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> Attached is the 2014 ethylene Oxide Inventory for Louisiana. The AI# is in column B and the permit number is in column R.
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>
> **From:** Larson, Darrin
> **Sent:** Tuesday, May 15, 2018 3:04 PM
> **To:** Yurk, Jeffrey <yurk.jeffrey@epa.gov>
> **Subject:** FW: EtO spreadsheet for LDEQ

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Tuesday, May 15, 2018 2:12 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: EtO spreadsheet for LDEQ

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Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 6/22/2018 2:27:30 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: EtO emission numbers

Thanks.

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM
To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

Robin Langdon of OAQPS called me after our conf. call yesterday, to discuss when OAQPS could provide us with the latest emission data for the 9 facilities on the slides OAQPS shared with us during the June 14 briefing. She said they need to brief Wehrum prior to sharing the latest information (risk numbers, etc.), but agreed to provide us the emission numbers on Monday. We can share the emissions data with the states, but she asked that EPA and the states hold off on reaching out to the facilities using this newest data until after the Wehrum briefing, which is set for next Wednesday.

Here is the current list of 9 EtO facilities:

Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana
Port Neches Plant (Huntsman Corp.)	Texas
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana
Shell Technology Center Houston	Texas

BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 6/29/2018 12:26:53 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]
Subject: RE: Spreadsheet with the 9 EtO facilities

Ok thank you!

From: Smith, Darcie
Sent: Thursday, June 28, 2018 5:21 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Hi Anupa –

I've double-checked with Madeleine and all the v2 emissions are the same as what you already have, with one exception and one expectation.

The exception is the TEXAS OPERATIONS facility in Longview TX. We received a change to a small release point (20 lbs out of 7 tons) that will not make a difference to overall risk so we did not make those changes.

We have an expectation of receiving new data from the Union Carbide facility in Taft LA but we have not yet received anything.

Hope that helps! If you need more, please let me know.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Friday, June 22, 2018 8:14 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Oh thanks, I didn't know that. Are the underlying emissions amounts the same as the v2 spreadsheets we have? I think my management is looking for pollutant amounts. If they are the same then I can use the v2 ones that Ihave.

Thanks Darcie.

From: Smith, Darcie
Sent: Thursday, June 21, 2018 5:01 PM

To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Hi Anupa –

There may be some confusion; there isn't a spreadsheet. The slides are it until we're able to share the entirety of v2 results (tract-level by pollutant and source group), as we did for v1.

Hope that helps,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, June 20, 2018 7:44 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Sorry, yes, the ones with the slides. I got the power point but I did not get the spreadsheet. Thank you!

From: Smith, Darcie
Sent: Tuesday, June 19, 2018 5:01 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Hi Anupa –

Are you referring to the ones in the NATA slides? Those are the latest. Is there another piece of information that you need?

We're talking with our AA Thursday and hope to provide full results after that.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Monday, June 18, 2018 10:17 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Spreadsheet with the 9 EtO facilities

Hi Darcie,
Could I please get the latest spreadsheet with the 9 EtO facilities in R6? I have an older version.

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 6/29/2018 3:48:11 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: EtO emission numbers

Thanks Cindy!

From: Parker, Cindy
Sent: Friday, June 29, 2018 10:22 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: EtO emission numbers

Fyi.

From: Smith, Darcie
Sent: Thursday, June 28, 2018 5:32 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: EtO emission numbers

Hi Cindy –

You guys are hitting all fronts! I've heard from Josh and Anupa as well, so please share with them too.

You are not missing anything; nothing has been sent. There is not any new emissions data from what is in that EtO spreadsheet. There has not been an official NATA update released. The only thing you have is the information in the slides at this point other than the EtO spreadsheet with our estimate of what risks to expect in v2. All that information is still current since no changes have been received for those facilities (as shown in the slides).

As for maps, there's the one in the slides with all the MSAs in Region 6 and then the one in the specific area in LA. Was there something else specific you're thinking of? Let me know.

Hope that helps somewhat.

Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Thursday, June 28, 2018 11:55 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Good Morning, Darcie,

I'm just checking with you to see if there is an official NATA update that's been issued yet? All we've heard is the informal information sent to our Air Enforcement Section Chief Darrin Larson (see below;)
I feel like we should be doing something, and instead, we're waiting? We are trying to pull together maps showing these facilities, but I'm also guessing the professional map-makers there, probably already have detailed graphics?
Was something else sent out and did we miss it?
Thank you,
Cindy Parker

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM
To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

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Shell Technology Center Houston	Texas

BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
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Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/12/2018 3:44:56 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: FW: Spreadsheet with the 9 EtO facilities

I think I told you about this email because I have an email from you shortly after I got this one.

From: Smith, Darcie
Sent: Thursday, June 28, 2018 5:21 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Hi Anupa –

I've double-checked with Madeleine and all the v2 emissions are the same as what you already have, with one exception and one expectation.

The exception is the TEXAS OPERATIONS facility in Longview TX. We received a change to a small release point (20 lbs out of 7 tons) that will not make a difference to overall risk so we did not make those changes.

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Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

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To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

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Thanks Darcie.

From: Smith, Darcie
Sent: Thursday, June 21, 2018 5:01 PM

To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Hi Anupa –

There may be some confusion; there isn't a spreadsheet. The slides are it until we're able to share the entirety of v2 results (tract-level by pollutant and source group), as we did for v1.

Hope that helps,
Darcie

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From: Ahuja, Anupa
Sent: Wednesday, June 20, 2018 7:44 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Sorry, yes, the ones with the slides. I got the power point but I did not get the spreadsheet. Thank you!

From: Smith, Darcie
Sent: Tuesday, June 19, 2018 5:01 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Spreadsheet with the 9 EtO facilities

Hi Anupa –

Are you referring to the ones in the NATA slides? Those are the latest. Is there another piece of information that you need?

We're talking with our AA Thursday and hope to provide full results after that.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Monday, June 18, 2018 10:17 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Spreadsheet with the 9 EtO facilities

Hi Darcie,
Could I please get the latest spreadsheet with the 9 EtO facilities in R6? I have an older version.

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 11/15/2017 4:28:07 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: Here is my table of EtO
Attachments: Anupa EtO.xlsx

All,
This is the table I generated for LA sources that are driving the risk. The yellow and the orange are Jeff's highlighting from the original spreadsheet, I have forgotten what he said they meant, I think the yellow means over the 100 in a million. As you can see, it already says what the numbers are based on – for me to give suggestions, I would have to get their calcs.

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/12/2018 5:39:14 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: Ethylene oxide facility in NM - NATA

Just FYi, the permitted EtO and PO together are limited to 6.1 tons.

From: Thompson, Steve
Sent: Thursday, July 12, 2018 12:34 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: Ethylene oxide facility in NM - NATA

So this statement appears to indicate that the current emissions are reduced from 3 tons to less than 1? Can you look up the Current TRI reported value?

Per Region V who contacted Sterigenics, emission reduction techniques were put into place by Sterigenics at this facility. TRI emissions reflect this- emissions went down by 83% between 2016 and 2014. TRI ID is 88008GRFFT2400A

Sent from my iPhone

On Jul 12, 2018, at 11:13 AM, Larson, Darrin <Larson.Darrin@epa.gov> wrote:

> Here's what I sent to NMED.
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Thursday, May 24, 2018 1:54 PM
> **To:** 'Gruebel, Ralph, NMENV' <Ralph.Gruebel@state.nm.us>
> **Cc:** Steve Thompson <thompson.steve@epa.gov>
> **Subject:** Ethylene oxide facility in NM - NATA
>
> Hi Ralph,
>
> Here's the facility I mentioned during our call. Please let me know if you would like to discuss further.
>
> For more info. on NATA in general, here's the link: https://www.epa.gov/national-air-toxics-assessment
>
> And here's a link to the IRIS ethylene oxide page:
> https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025
>
> Darrin

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

<Ethylene Oxide NATA NM.xlsx>

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/18/2018 3:28:43 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: Can you ask OAQPS for EtO emission numbers?

Ok.

From: Larson, Darrin
Sent: Wednesday, July 18, 2018 10:24 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Can you ask OAQPS for EtO emission numbers?

I gave Steve a quick update on the call yesterday, and he'd like to see if OAQPS is now in the position (after yesterday's Wehrum briefing) to give us the emissions data for the 9 facilities. Can you check with Darcie?

I would stress to her that while we have the EI data for all emission points for the 9 facilities (provided by Jeff), we don't have all of the updates to the emissions that may have been provided by the companies or trade associations.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Monday, July 16, 2018 5:52 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO emission numbers

Hi Darrin –

Welcome back!! Sadly, you haven't missed anything in terms of progress on NATA.

The V2 spreadsheet that you're referring to only contained *block* level estimates of ethylene oxide risks from *point* sources. The complete NATA results (which you don't have) contain *tract* level risks for all pollutants from *all* sources. At the time we shared that data with you, we did not have tract level results for V2, so we provided our best estimate (as explained in the accompanying document) of what the V2 tract risks would be when available. To do this we used the hybrid ratio of AERMOD & CMAQ for each tract from V1 (the block and tract level results for V1 were also provided in the spreadsheet for reference). But it was still only an estimate. That's why we provided all the facilities, not just those with a "yes." (Also, some regions are interested in high block level results even if they're not going to show up in NATA.)

Since we now have the full NATA results, we've been able to do a little digging into each census tract with an elevated risk and found the list of 9 facilities that we shared with you in the slides, mostly one per MSA. That doesn't mean that list is exhaustive. That just means that our first pass through found them. Ideally, you would do more digging when results are available, and you may find additional facilities you wish to examine. NATA just points out areas, not facilities, and is the starting point for further investigation. Does that help explain the difference in the two lists?

I know you're probably wondering when you'll have full results to start in on and I wish I could answer that question, but right now I do not know the answer. Once that happens, we'll be happy to work with you to try and "finalize" the list of facilities, however many happen to be on it. Thank you for not sharing the risk numbers with your states just yet. I remain optimistic that once we get the go ahead to share with you, we'll also be allowed to share the numbers with the states. Let us know if you have additional questions.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Larson, Darrin
Sent: Monday, July 16, 2018 1:38 PM
To: Langdon, Robin <Langdon.Robin@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO emission numbers

Hi Robin and Darcie,

I'm back in the office and getting caught up, and trying to understand Darcie's response, which came in while I was out.

The V2 spreadsheet we had been using to plan and to brief our managers prior to the OAQPS June 14 briefing contained 20 EtO facilities in R6 states. It was a V2 spreadsheet Darcie sent to the regions on March 15, 2018. Of the 20 facilities, 13 had a yes in the column, "Is Census Tract Cancer Risk Expected to be > 100 in 1-million in V2?"

In the PowerPoint OAQPS used for the June 14 briefing, there are 9 EtO facilities listed with elevated risk, so our senior managers asked us why OAQPS had 9 EtO facilities in the PP and we had 13 in the V2 spreadsheet we had shared earlier. In advance of the briefing, OAQPS had mentioned that there was a revised list expected soon, so we all thought the list of 9 was the revised list. We shared the 9 names with the states (not the risk numbers), and asked you for the emission data to go with the 9.

Can you help us understand how you came up with the list of 9? If it's not based on new emission data, as we assumed, how did you cut the V2 list of 13 down to 9?

Thanks,

Darrin

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Thursday, June 28, 2018 5:32 PM

To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: EtO emission numbers

Hi Cindy –

You guys are hitting all fronts! I've heard from Josh and Anupa as well, so please share with them too.

You are not missing anything; nothing has been sent. There is not any new emissions data from what is in that EtO spreadsheet. There has not been an official NATA update released. The only thing you have is the information in the slides at this point other than the EtO spreadsheet with our estimate of what risks to expect in v2. All that information is still current since no changes have been received for those facilities (as shown in the slides).

As for maps, there's the one in the slides with all the MSAs in Region 6 and then the one in the specific area in LA. Was there something else specific you're thinking of? Let me know.

Hope that helps somewhat.

Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Thursday, June 28, 2018 11:55 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Good Morning, Darcie,

I'm just checking with you to see if there is an official NATA update that's been issued yet? All we've heard is the informal information sent to our Air Enforcement Section Chief Darrin Larson (see below;)
I feel like we should be doing something, and instead, we're waiting? We are trying to pull together maps showing these facilities, but I'm also guessing the professional map-makers there, probably already have detailed graphics?
Was something else sent out and did we miss it?
Thank you,
Cindy Parker

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM
To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

Robin Langdon of OAQPS called me after our conf. call yesterday, to discuss when OAQPS could provide us with the latest emission data for the 9 facilities on the slides OAQPS shared with us during the June 14 briefing. She said they need to brief Wehrum prior to sharing the latest information (risk numbers, etc.), but agreed to provide us the emission numbers on Monday. We can share the emissions data with the states, but she asked that EPA and the states hold off on reaching out to the facilities using this newest data until after the Wehrum briefing, which is set for next Wednesday.

Here is the current list of 9 EtO facilities:

Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana
Port Neches Plant (Huntsman Corp.)	Texas
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana
Shell Technology Center Houston	Texas
BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/12/2018 4:44:17 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: EtO emission numbers

Ok good, then that is the last email I got. I wasn't sure how far back to go.

From: Larson, Darrin
Sent: Thursday, July 12, 2018 11:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO emission numbers

Thanks, Anupa. My last day was June 28. This was sent to Cindy that day, but it wasn't shared with me.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 10:44 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: EtO emission numbers

What day did you leave for vacation? I forwarded this to ST when you were gone but you may have already gotten this info.

From: Ahuja, Anupa
Sent: Tuesday, July 03, 2018 1:00 PM
To: Thompson, Steve <thompson.steve@epa.gov>
Subject: FW: EtO emission numbers

From: Parker, Cindy
Sent: Friday, June 29, 2018 10:22 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: EtO emission numbers

Fyi.

From: Smith, Darcie
Sent: Thursday, June 28, 2018 5:32 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: EtO emission numbers

Hi Cindy –

You guys are hitting all fronts! I've heard from Josh and Anupa as well, so please share with them too.

You are not missing anything; nothing has been sent. There is not any new emissions data from what is in that EtO spreadsheet. There has not been an official NATA update released. The only thing you have is the information in the slides at this point other than the EtO spreadsheet with our estimate of what risks to expect in v2. All that information is still current since no changes have been received for those facilities (as shown in the slides).

As for maps, there's the one in the slides with all the MSAs in Region 6 and then the one in the specific area in LA. Was there something else specific you're thinking of? Let me know.

Hope that helps somewhat.

Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Thursday, June 28, 2018 11:55 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Good Morning, Darcie,

I'm just checking with you to see if there is an official NATA update that's been issued yet? All we've heard is the informal information sent to our Air Enforcement Section Chief Darrin Larson (see below;)
I feel like we should be doing something, and instead, we're waiting? We are trying to pull together maps showing these facilities, but I'm also guessing the professional map-makers there, probably already have detailed graphics?
Was something else sent out and did we miss it?
Thank you,
Cindy Parker

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM
To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

Robin Langdon of OAQPS called me after our conf. call yesterday, to discuss when OAQPS could provide us with the latest emission data for the 9 facilities on the slides OAQPS shared with us during the June 14 briefing. She said they need to brief Wehrum prior to sharing the latest information (risk numbers, etc.), but agreed to provide us the emission numbers on Monday. We can share the emissions data with the states, but she asked that EPA and the states hold off on reaching out to the facilities using this newest data until after the Wehrum briefing, which is set for next Wednesday.

Here is the current list of 9 EtO facilities:

Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana
Port Neches Plant (Huntsman Corp.)	Texas
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana
Shell Technology Center Houston	Texas
BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/25/2018 12:30:15 PM
To: Strum, Madeleine [Strum.Madeleine@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]
Subject: RE: increase in EtO emissions of 17 tons

Thanks Madeleine. That is helpful to know that it is actuals.

From: Strum, Madeleine
Sent: Wednesday, July 25, 2018 7:27 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Subject: RE: increase in EtO emissions of 17 tons

Hi All

About PTE vs actual: NATA uses the NEI; NEI data are primarily provided by State, Local and Tribal Agencies (SLT). HAPs are submitted voluntarily. SLT are instructed to provide actual emissions for the year of the inventory (not PTE, not permitted).

About the review: Danielle Nesvacil (TCEQ) reviewed Port Neches and indicated no changes were needed to the 2014 NEI v1. I do not know what depth Danielle went into with her review, but we did need to follow up with her on Port Neches (and 4 other facilities) because she thought the deadline was August and it was June. Her email was as follows:

"No emissions updates are necessary to these five sites. All five sites have plants that use/manufacture ethylene oxide as process units on the site. I have more detail and can provide if you would like, but thisat's the summary version. PLease let me know if you have any questions."

Madeleine
Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Smith, Darcie
Sent: Tuesday, July 24, 2018 6:41 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: increase in EtO emissions of 17 tons

Hi Anupa –

I'm copying Madeleine on this since she is involved in a lot of the emissions related review as well.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks for bringing these points up Anupa. I think you're a few steps ahead of NATA and into the further investigation step of the process, which is great! As we continue moving forward, I'm sure we'll have more questions for you about the situations you've mentioned.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 11:00 AM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: increase in EtO emissions of 17 tons

Hi, I wasn't sure who I should send this to so I included you both.

On the R6 ppt slides for today's call, I noticed that for the Port Neches, tx plant the review column says "no changes" and under review it says "TCEQ – no changes". For the Santa Teresa NM plant, the review column says "emissions decreased."

I have reviewed the TRI data for both plants and:

Ex. 5 Deliberative Process (DP)

I am concerned that Ex. 5 Deliberative Process (DP)
Ex. 5 Deliberative Process (DP)

Thanks,
Anupa

From: Caparoso, Jennifer
Sent: Tuesday, July 24, 2018 6:25 AM

To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Emissions data

Hi Anupa,

While not reflected in NATA, we received additional information from the Union Carbide St. Charles Facility that we are still evaluating and discussing with the facility. When we complete our analysis, if there are any changes, we will share them with you. We have not received any other emissions changes.

Jennifer Caparoso, P.E.
CDR, USPHS
Refining and Chemicals Group
SPPD/OAQPS
U.S. Environmental Protection Agency
Mail Code: E143-01
Research Triangle Park, NC 27711
(919) 541-4063

From: Ahuja, Anupa
Sent: Thursday, July 19, 2018 11:10 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Ok thanks Darcie.

From: Smith, Darcie
Sent: Thursday, July 19, 2018 10:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Hi Anupa –

Thanks for your question. You're right, we have spoken with our AA, but the conversation is not yet over…

Regarding the emissions, as I shared with you previously, there are no new emissions, with the exception of a minor one (20 lbs out of 7 tons) for Texas Operations in Longview TX and possibly some updated emissions from Union Carbide St. Charles. We've been expecting some, so I've copied Jennifer Caparoso on this because if we have received new emissions for that facility, she will have them.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, July 18, 2018 11:32 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Emissions data

Hi Darcie,
Now that the Wehrum briefing is done, my management is asking if it would be possible for us to get the updated emissions data for the 9 facilities in R6? We have the 2014 emissions inventory data, but we would like to get the updates to the emissions that may have been provided by the companies.

Thank you,
Anupa

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/24/2018 3:43:47 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: Data question on ppt for today's call

Thanks Fran.

From: Verhalen, Frances
Sent: Tuesday, July 24, 2018 10:03 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Data question on ppt for today's call

All: please remember that the NATA deals with the EI or TRI that was for 2014. This NATA report will relate only to the 2014 emissions or inventory for the projected risks.

The comparisons must remain in context. Additional information received after January 1, 2015, will be included in the calculations for the next round. This additional information is relevant in discussions about *corrective/compliance* actions.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 9:52 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Data question on ppt for today's call

On the R6 ppt slides for today's call, I noticed that for the Port Neches, tx plant the review column says "no changes" and under review it says "TCEQ – no changes". For the Santa Teresa NM plant, the review column says "emissions decreased."

I have reviewed the TRI data for both plants and:

1)

2)

Ex. 5 Deliberative Process (DP)

I am concerned that Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Yurk, Jeffrey [yurk.jeffrey@epa.gov]
Sent: 11/28/2017 7:13:04 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]; Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: RE: Here are the materials for today's EtO briefing
Attachments: R6 NATA Risk Priorities.xlsx

Here's a summary of the 13 facilities in the Region where offsite risks exceed 100 in a million for ethylene oxide.

From: Ahuja, Anupa
Sent: Tuesday, November 28, 2017 9:27 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: Here are the materials for today's EtO briefing

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 12/5/2017 10:51:38 PM
To: Parker, Cindy [parker.cindy@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Osbourne, Margaret [osbourne.margaret@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: question - who has action item to revise spreadsheet for Sam?
Attachments: Ethylene Oxide Priority Facilities 120517..xlsx

I said I would revise the spreadsheet, once Josh gave me the parent name information. I made the other changes we discussed today (hiding and abbreviating, and adding "Sterilizer" to BCP – see attached.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Tuesday, December 05, 2017 1:53 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: question - who has action item to revise spreadsheet for Sam?

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We don't want to use a different spreadsheet for Wren than we use for Sam.
We will be adding in company name in driver facility column, and hide Facility Type column. We will add a name to the spreadsheet titled "2014 Ethylene Oxide Facilities in Region 6", and date it. We will remove Denka, too.

Since we discussed this at the meeting this morning, and I'm not sure what was decided, this is what we're planning in preparation for briefing Wren.

Did we decide something else?

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Madden, Joshua [madden.joshua@epa.gov]
Sent: 12/6/2017 3:25:48 PM
To: Parker, Cindy [parker.cindy@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Osbourne, Margaret [osbourne.margaret@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: question - who has action item to revise spreadsheet for Sam?
Attachments: Priority Facilities Sheet Dec 05 2017.xlsx

Darrin here is the revised spreadsheet with the parent company name.

From: Parker, Cindy
Sent: Wednesday, December 06, 2017 8:29 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: question - who has action item to revise spreadsheet for Sam?

Thanks, Darrin.
Working on revising We Care for Wren today at 1:00. Have to coordinate getting toys together also this morning. I think Josh has the info already prepared. Yesterday was a blur. Today, hopefully less so.

From: Larson, Darrin
Sent: Tuesday, December 05, 2017 4:52 PM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: question - who has action item to revise spreadsheet for Sam?

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Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Tuesday, December 05, 2017 1:53 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
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Did we decide something else?

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Wakeland, Morton [wakeland.morton@epa.gov]
Sent: 7/30/2018 5:16:27 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Ethylene oxide TRI data

see if sold...do you have an address

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 11:39 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Let me look into this one. Those are the 2 cities mentioned in various briefings.

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:29 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Is that the way you spell city?

Zero TRI's

Search Parameters:

TRI facility information searched

City Name: Hanville

State Abbreviation: LA

Results are based on data extracted on MAR-07-2018

No Results found.

Total Number of Facilities Retrieved: 0

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 11:05 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

How about Hanville, LA (I don't have very accurate info on location it seems)

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:04 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

There is no current Union Carbide reporter in Lake Charles, did they sell?

TRI Facility Report	TRI Facility ID	Facility Name	Address	County Name	LONGITUDE
TRI Facility Report	70602RCDNCI10WE	ARCADIAN FERTILIZER L.P.	I-10 W. LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.233467, -93.263086
TRI Facility Report	70602BNGLS4400L	BOEING LOUISIANA INC.	4400 LEGION ST. LAKE CHARLES, LA 706021397	CALCASIEU PARISH	30.223148, -93.156224
TRI Facility Report	70606CLCSRWESTE	CALCASIEU REFINING CO	4359 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.1338, -93.3206
TRI Facility Report	70601CRBLN900OP	CARBOLINE CO	900 OPELO US AS ST LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.24206, -93.20806
TRI Facility Report	70615GLFCS627LE	GULF COAST CHEMICAL LLC	6207 LESLIE LN LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.234301, -93.126616
TRI Facility Report	70602NDSTR5716E	INDUSTRIAL PIPE & PLASTICS INC.	5716 E. BROAD ST. LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.23019, -93.13412
TRI Facility Report	70605LKCHR3943G	LAKE CHARLES CARBON CO	4040 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.11837, -93.29295
TRI Facility Report	7060WLKCHR821HE	MARTIN OPERATING PTNR - LAKE CHARLES DOCK	3700 HENRY PUGH BLVD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.10554, -93.304878
TRI Facility Report	7061WMRTNP37BUN	MARTIN OPERATING PTNR-LAKE CHARLES	307 BUNKER RD LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.2331, -93.16344
TRI Facility Report	70605MSHPLRT14B	MESH PLASTICS LTD.	2700 MCNEESE FARM RD., FARM RD. LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.18357, -93.17675
TRI Facility Report	70615NRTHR4400L	NORTHROP GRUMMAN CORP.	4400 SEN. J. B. JOHNSTON AVE. LAKE CHARLES, LA 706155157	CALCASIEU PARISH	30.22324, -93.15612
TRI Facility Report	70616GLDLN4646H	PELICAN REFINING CO LLC	4646 LA. HWY 3059 LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.28614, -93.1448
TRI Facility Report	7060WSHWMD3191W	SHAW MODULAR SOLUTIONS	3191 W LINCOLN RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.110144, -93.276949
TRI Facility Report	70615SPRTC111JA	SPARTECH POLYCOM INC	1101 JAMES SUDDUTH PKWY LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.220303, -93.13836

Showing 1 to 14 of 14 entries Show 25 entries

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Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:54 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Yes, both, thank you so much!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 10:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Was in a meeting just back to desk Anupa…give me a sec

I presume air stack and air fugitive releases – correct?

Mort

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U.S. EPA Region 6
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Hi Mort,
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1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
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6. Midwest Sterilization – Laredo, TX
7. Eastman – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Wakeland, Morton [wakeland.morton@epa.gov]
Sent: 7/30/2018 5:18:11 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Graphs are super pretty, but they do show the relationship from year to year.
Attachments: Taminco_TotalAir_Ethylene_Oxide.xlsx; Midwest_Sterilization_TotalAir_EthyleneOxide.xlsx; Huntsman_Petrochemical_TotalAir_Ethylene_Oxide.xlsx; Evonik_TotalAir_Ethylene_Oxide.xlsx

Best,
Mort

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Showing 1 to 14 of 14 entries Show 25 entries

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Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
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9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/31/2018 6:12:13 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: FW: Recommended Criteria for choosing facilities to focus on for early reductions under NATA

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Tuesday, July 31, 2018 11:25 AM
To: Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Recommended Criteria for choosing facilities to focus on for early reductions under NATA

On yesterday's call, we were asked to recommend criteria for prioritizing facilities to work with for early reductions while HQs works on rule revisions.

Based largely on the charts below, I believe we should Ex. 5 Deliberative Process (DP)
Ex. 5 Deliberative Process (DP)

Three facilities would be the focus:

Ex. 5 Deliberative Process (DP)

I see this as having following advantages:

Ex. 5 Deliberative Process (DP)

Please let me know your thoughts because I imagine that enforcement will continue to carry a great deal of the load in investigating these facilities.

MSAs with Elevated Cancer Risks

2014 NATA Version 2

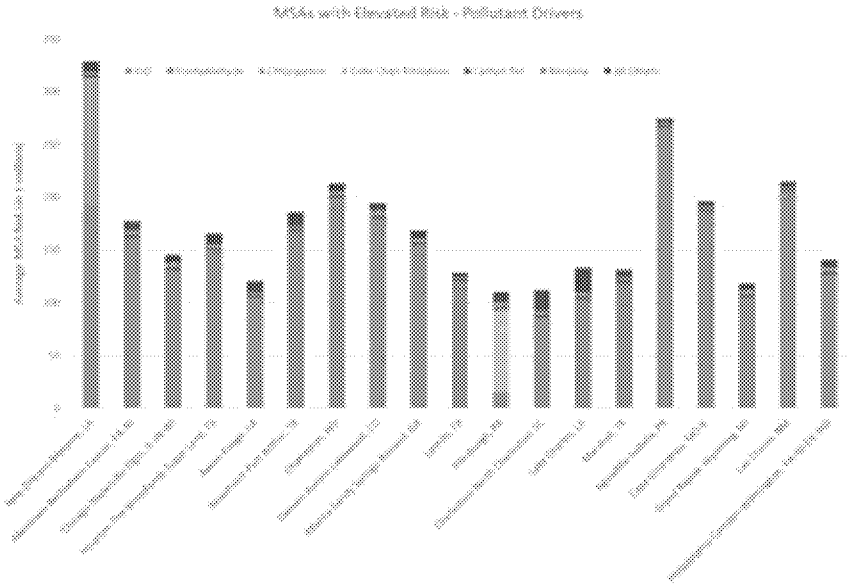
MSA	Primary Cancer Risk per million	Highest Risk Tract in MSA per million	MSA	Primary Cancer Risk per million	Highest Risk Tract in MSA per million
New Orleans-Metairie, LA**,†	19	2,000	Pittsburgh, PA**,†	3	100
Allentown-Bethlehem-Easton, PA-NJ	18	600	Charleston-North Charleston, SC	2	100
Chicago-Naperville-Elgin, IL-IN-WI†	11	300	Lake Charles, LA	2	100
Houston-The Woodlands-Sugar Land, TX	11	300	Marshall, TX	2	200
Baton Rouge, LA	9	200	Aguadilla-Isabela, PR	1	300
Beaumont-Port Arthur, TX	8	300	Cape Girardeau, MO-IL	1	200
Charleston, WV	6	400	Grand Rapids-Wyoming, MI	1	100
Denver-Aurora-Lakewood, CO†	4	500	Las Cruces, NM	1	200
Atlanta-Sandy Springs-Roswell, GA	3	200	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD†	1	100
Laredo, TX	3	100			

** With the exception of New Orleans-Metairie, LA (Nonpoint Area) and Pittsburgh, PA (Lake Erie Emissions), the primary risks are driven by emissions of pollutant cancer from point sources.

† The following 5 MSAs were also in the 2011 NATA as MSAs with elevated cancer risks: Chicago-Naperville-Elgin, IL-IN-WI; Denver-Aurora-Lakewood, CO; New Orleans-Metairie, LA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD; and Pittsburgh, PA.

MSAs with Elevated Cancer Risks – Pollutant Drivers

2014 NATA Version 2



Message

From: Wakeland, Morton [wakeland.morton@epa.gov]
Sent: 7/30/2018 5:31:02 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

got it, let me see what they've done with EO
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 12:30 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

Yes, I think you are right – that is the one

From: Wakeland, Morton
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To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

you bet – graphs are easier to see than a list of numbers….hope they are useful…

Let me know about union carbide….wait here is a list of all Union Carbides in LA

Hey I think it's the spelling

TRI FACILITY REPORT	TRI FACILITY ID	FACILITY NAME	ADDRESS	COUNTY NAME	LATITUDE LONGITUDE	TOTAL FORMS
TRI Facility Report	70079CYPRS901PR	CYPRESS POLYPROPYLENE PLANT UNION CARBIDE CORP.	901 PROSPECT AVE PO BOX 518 NORCO, LA 70079	ST CHARLES PARISH	30.003106, -90.393377	34
TRI Facility Report	70057NNCRBHWY31	ST CHARLES OPERATIONS (TAFT/STAR) UNION CARBIDE CORP	355 LA HWY 3142 (GATE 1) HAHNVILLE, LA 70057	ST CHARLES PARISH	29.987341, -90.445067	1567

Showing 1 to 2 of 2 entries Show 10 entries

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 12:25 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Graphs are super pretty, but they do show the relationship from year to year.

Thanks so much Mort!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 12:18 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Graphs are super pretty, but they do show the relationship from year to year.

Best,
Mort

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Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 11:05 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

How about Hanville, LA (I don't have very accurate info on location it seems)

From: Wakeland, Morton
Sent: Monday, July 30, 2018 11:04 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

There is no current Union Carbide reporter in Lake Charles, did they sell?

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	LONGITUDE
TRI Facility Report	70602RCDNCI10WE	ARCADIAN FERTILIZER L.P.	I-10 W. LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.233467, -93.263086
TRI Facility Report	70602BNGLS4400L	BOEING LOUISIANA INC.	4400 LEGION ST. LAKE CHARLES, LA 706021397	CALCASIEU PARISH	30.223148, -93.156224
TRI Facility Report	70606CLCSRWESTE	CALCASIEU REFINING CO	4359 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.1338, -93.3206
TRI Facility Report	70601CRBLN900OP	CARBOLINE CO	900 OPELO US AS ST LAKE CHARLES, LA 70601	CALCASIEU PARISH	30.24206, -93.20806
TRI Facility Report	70615GLFCS627LE	GULF COAST CHEMICAL LLC	6207 LESLIE LN LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.234301, -93.126616
TRI Facility Report	70602NDSTR5716E	INDUSTRIAL PIPE & PLASTICS INC.	5716 E. BROAD ST. LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.23019, -93.13412
TRI Facility Report	70605LKCHR3943G	LAKE CHARLES CARBON CO	4040 W TANK FARM RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.11837, -93.29295
TRI Facility Report	7060WLKCHR821HE	MARTIN OPERATING PTNR - LAKE CHARLES DOCK	3700 HENRY PUGH BLVD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.10554, -93.304878
TRI Facility Report	7061WMRTNP37BUN	MARTIN OPERATING PTNR-LAKE CHARLES	307 BUNKER RD LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.2331, -93.16344
TRI Facility Report	70605MSHPLRT14B	MESH PLASTICS LTD.	2700 MCNEESE FARM RD., FARM RD. LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.18357, -93.17675
TRI Facility Report	70615NRTHR4400L	NORTHROP GRUMMAN CORP.	4400 SEN. J. B. JOHNSTON AVE. LAKE CHARLES, LA 706155157	CALCASIEU PARISH	30.22324, -93.15612
TRI Facility Report	70616GLDLN4646H	PELICAN REFINING CO LLC	4646 LA. HWY 3059 LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.28614, -93.1448
TRI Facility Report	7060WSHWMD3191W	SHAW MODULAR SOLUTIONS	3191 W LINCOLN RD LAKE CHARLES, LA 70605	CALCASIEU PARISH	30.110144, -93.276949
TRI Facility Report	70615SPRTC111JA	SPARTECH POLYCOM INC	1101 JAMES SUDDUTH PKWY LAKE CHARLES, LA 70615	CALCASIEU PARISH	30.220303, -93.13836

Showing 1 to 14 of 14 entries Show 25 entries

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:54 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: Ethylene oxide TRI data

Yes, both, thank you so much!

From: Wakeland, Morton
Sent: Monday, July 30, 2018 10:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Ethylene oxide TRI data

Was in a meeting just back to desk Anupa…give me a sec

I presume air stack and air fugitive releases – correct?

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 10:31 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: Ethylene oxide TRI data

Hi Mort,
Can I please get both the 2014 and 2016 TRI data for Ethylene Oxide the following facilities (trying to see there were any substantial increases/decreases):

1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
3. Evonik (formerly Air Products Reserve plant) – Reserve, LA
4. Taminco – St. Gabriel, LA

5. Huntsman Port Neches Plant – Port Neches, TX
6. Midwest Sterilization – Laredo, TX
7. Eastman – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Thompson, Steve [thompson.steve@epa.gov]
Sent: 8/2/2018 6:56:01 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Fwd: 2014 NATA short term facility action
Attachments: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

From: "Stenger, Wren" <stenger.wren@epa.gov>
Date: August 2, 2018 at 11:46:16 AM CDT
To: "Seager, Cheryl" <Seager.Cheryl@epa.gov>, "Thompson, Steve" <thompson.steve@epa.gov>
Cc: "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>
Subject: 2014 NATA short term facility action

Here is the draft for our short term facilities action. I will share with David at 1 pm. See if we got everything covered to your satisfaction. Included state coord and we may have more facilities in the short term after coord with state.

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

Message

From: Yurk, Jeffrey [yurk.jeffrey@epa.gov]
Sent: 7/30/2018 8:40:02 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Can I pls get the 2014 and 2106 EtO EI data
Attachments: EtO 2014 and 2016 whole state emissions inventory.xlsx

Attached are all EtO EI data from all sources in TX and LA for 2014 and 2016

From: Ahuja, Anupa
Sent: Monday, July 30, 2018 9:59 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: Can I pls get the 2014 and 2106 EtO EI data

Hi Jeff,
Can I please get both the 2014 and 2016 EI data for EtO the following facilities (trying to see there were any substantial increases/decreases):

1. BCP Ingredients – New Hampton LA
2. Union Carbide - Lake Charles LA
3. Evonik (formerly Air Products Reserve plant) – Reserve, LA
4. Taminco – St. Gabriel, LA

5. Huntsman Port Neches Plant – Port Neches, TX
6. Midwest Sterilization – Laredo, TX
7. Texas Operations? I don't know the real name here – Longview, TX
8. Shell Technology Center – Houston, TX
9. Sterigenics – Santa Teresa, NM

Thank you,
Anupa

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 1/25/2018 8:59:09 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Osbourne, Margaret [osbourne.margaret@epa.gov]
CC: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: R5 is reaching out to industry - EtO group call on Thursday, January 25: Call-in number and agenda

I sat in on today's call, and was glad I did.

R5's Acting RA was very concerned about the risk numbers, so they sent letters to two facilities w/ IRIS update info. for EtO, modeling numbers, and asking for the opportunity to discuss (and possibly do a site visit). They said they ran their own risk modeling so they wouldn't have to use the NATA numbers, and said it was something that wasn't difficult to do. One of the companies was Sterigenics, which has a facility in NM. Margaret Sieffert was the contact on the call today, and I'm going to get copies of the letters.

R5 also created a fact sheet for outreach to the health care sector. No other details provided – need to know more.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Thursday, January 25, 2018 1:33 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: EtO group call on Thursday, January 25: Call-in number and agenda

---

From: Bellizzi, Carol
Sent: Friday, January 19, 2018 4:00 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Bollweg, George <bollweg.george@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Kierys, Dawid <kierys.dawid@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Stone, William <stone.william@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>; Shine, Brenda <Shine.Brenda@epa.gov>
Cc: Owens, Katharine <Owens.Katharine@epa.gov>
Subject: EtO group call on Thursday, January 25: Call-in number and agenda

Hello, EtO Group.

Here are the call-in info and an agenda for our call on January 25, from 3 p.m. to 4 p.m. Eastern time. If you have any additions to the agenda prior to the call, please let me know.

Call-in info

Time:	3 p.m. to 4 p.m. Eastern Time
Call-in number:	866-299-3188
Code:	2126373745

Agenda

1. Review schedule for the NEI v2 impacts- Ted, Madeleine
2. Update from each Region and HQ office on the call
3. Processes and controls in EtO and polyols & polyethers manufacturing- Brenda Shine has will join us to see if the group can benefit from her experience and knowledge on these subjects; and, if we can, then set up a next meeting for the topic.
4. Has each Region informed its management of its needs for this effort? Is this still a topic for an APM call?
5. Progress on outreach to industrial sectors- Margaret, R6 FAQs
6. Cost to measure EtO outside a facility fenceline for a model-to-monitor comparison study- Dave Shelow.

Thanks.
Carol

_____

Carol Bellizzi
Permitting Section
Air Programs Branch
U.S. EPA Region 2
tel: 212-637-3712

-----Original Appointment-----
From: Bellizzi, Carol
Sent: Thursday, October 12, 2017 4:16 PM
To: Bellizzi, Carol; Ahuja, Anupa; Bellizzi, Carol; Bollweg, George; Bremer, Kristen; Cain, Alexis; Casso, Ruben; Davidson, Ken; Doolan, Stephanie; Fry, Jessica; Gross-Davis, CarolAnn; Jackson, Scott; Kierys, Dawid; Lancey, Susan; Louis, Egide; Madden, Joshua; McCrowey, Clinton; Merrill, Raymond; Morris, Mark; Olson, Kyle; Owens, Katharine; Palma, Ted; Parker, Cindy; Rimer, Kelly; Shelow, David; Sieffert, Margaret; Smith, Darcie; Stone, William; Strum, Madeleine; Twickler, Donna; Verhalen, Frances; Narvaez, Madonna
Cc: Shine, Brenda
Subject: EtO group call in January 2018
When: Thursday, January 25, 2018 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Cal-in number to be provided

Colleagues,

This invitation is to reserve a time in January. Agenda will depend on results of the prior call.

Thanks.
Carol

Message

From: Thompson, Steve [thompson.steve@epa.gov]
Sent: 8/2/2018 9:09:04 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Fwd: 2014 NATA R6 facilities for short-term action
Attachments: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

From: "Stenger, Wren" <stenger.wren@epa.gov>
Date: August 2, 2018 at 3:58:54 PM CDT
To: "Koerber, Mike" <Koerber.Mike@epa.gov>, "Smith, Darcie" <Smith.Darcie@epa.gov>
Cc: "Gray, David" <gray.david@epa.gov>, "Idsal, Anne" <idsal.anne@epa.gov>, "Seager, Cheryl" <Seager.Cheryl@epa.gov>, "Thompson, Steve" <thompson.steve@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Donaldson, Guy" <Donaldson.Guy@epa.gov>, "Verhalen, Frances" <verhalen.frances@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>
Subject: 2014 NATA R6 facilities for short-term action

As requested. Call if you have any questions. Thanks

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

2014 NATA Release Coordination – Ethylene Oxide
August 2, 2018

- EPA Region 6 has nine facilities with risk exceeding 100 in 1,000,000 from air toxics associated with ethylene oxide (EtO) based on the 2014 EIs and TRIs.
    - Nine facilities have risk driven by ethylene oxide.
    - Four facilities are in Louisiana, four in Texas, and one in New Mexico.
- The national approach is to (1) prioritize a subset of facilities for action in the short-term, and (2) develop rulemaking based on ethylene oxide technologies and operations.
- In the short-term, based on the cumulative risk at the metropolitan statistical area (MSA) level, Region 6 proposes to address, at a minimum,
    - The New Orleans-Metarie, LA, MSA
        - Facilities that drive the risk (tract level): Union Carbide – St. Charles (risk 2,000), BCP Ingredients (risk 2,000), Air Products – Reserve (100)
        - Reason for prioritization: Cumulative risk of the New Orleans MSA (approximately 325 in 1,000,000) is highest in nation
    - The Beaumont-Port Arthur TX MSA
        - Facility that drives the risk (tract level): Port Neches Plant - Huntsman Corporation (risk 300)
        - Reason for prioritization: New information indicates that Port Neches Plant increased emissions from 10.8 tons per year (tpy) in 2014 to 38 tpy in 2017
- As Region 6 gathers information about EtO technologies, we need to engage the states without delay in planning. This may result in additional priority facilities.
- The States of Texas and Louisiana have requested coordination on the 2014 NATA; both may be able to provide assessments and obtain risk reductions from facilities quickly as they have authority for permitting and compliance for air toxics.
- The State of New Mexico has confirmed that the Santa Teresa facility installed new controls after the 2014 TRI, and the emissions have been reduced by 83%. Therefore, this facility is low priority for short-term action.

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/6/2018 12:22:43 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Fwd: 2014 NATA short-term facilities list

Sent from my iPhone

Begin forwarded message:

> **From:** "Verhalen, Frances" <verhalen.frances@epa.gov>
> **Date:** August 3, 2018 at 8:06:34 PM CDT
> **To:** "Larson, Darrin" <Larson.Darrin@epa.gov>
> **Subject: Re: 2014 NATA short-term facilities list**
>
> Checked with Darcie. Was not over 100 in 1M for Tracy. Will confirm next week
>
> Sent from my iPhone
>
> On Aug 3, 2018, at 4:37 PM, Larson, Darrin <Larson.Darrin@epa.gov> wrote:
>
>> It looks like Fran is out of the office for a couple of days, so does anyone know why the number is 9 and not 10?
>>
>> When the correction was made to the slide to add Sasol, LA went from 4 to 5.
>>
>> Sent from my iPhone
>>
>> On Aug 3, 2018, at 10:39 AM, Parker, Cindy <parker.cindy@epa.gov> wrote:
>>
>>> FYI. Sharing info -
>>> And the regional communications contacts for NATA rollout are Diane Taheri and Fran Verhalen, and Guy Donaldson and David Gray are secondary contacts.
>>>
>>> **From:** Verhalen, Frances
>>> **Sent:** Friday, August 03, 2018 10:06 AM
>>> **To:** Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
>>> **Subject:** FW: 2014 NATA short-term facilities list
>>>
>>> Frances Verhalen, P.E., Chief
>>> Air Monitoring/Grants Section
>>> US Environmental Protection Agency
>>> 1445 Ross Avenue (MC 6MM-AM)

Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Verhalen, Frances
Sent: Thursday, August 02, 2018 3:24 PM
To: Stenger, Wren <stenger.wren@epa.gov>
Subject: RE: 2014 NATA short-term facilities list

Dang it. Forgot to change the number of facilities in the first line. Should be 9, not 10. Here is the corrected version.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Stenger, Wren
Sent: Thursday, August 02, 2018 3:12 PM
To: Seager, Cheryl <Seager.Cheryl@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Gray, David <gray.david@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Subject: 2014 NATA short-term facilities list

Here is a final draft. I think we have all the concerns addressed.

David, we took out mention of Denka since risk is NOT driven by ethylene oxide.

I will send this to OAR at 4 pm.

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

<2014 NATA R6 short-term action recommendation Aug 2 2018 (003).docx>

Message

From: Wakeland, Morton [wakeland.morton@epa.gov]
Sent: 8/8/2018 2:29:24 PM
To: TODD_A_MCLANE@HUNTSMAN.COM
Subject: Regarding your 2016 TRI Ethylene Oxide Air releases
Attachments: Huntsman_EthyleneOxide_2016.pdf

Importance: High

Good Morning Todd:

I sent an email to your previously regarding the TRI Program's Annual Data Quality checks for ethylene oxide.

Something else has been called to my attention and therefore this is a subsequent request separate from the previous email.

A review of what Huntsman reported to NEI (National Emissions Inventory) compared to what was reported to TRI for ethylene oxide is vastly different. It may be best to ask whoever does your NEI emissions calculations how they arrived at what was report for ethylene oxide.

Huntsman indicated for TRI reporting the basis of estimate for the fugitive and stack air releases for ethylene oxide as **"O"**

Part II. Chemical Identification Information

to through-put or equipment type (e.g., air emission factors).

O Estimate is based on other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgment. This would include applying estimated removal efficiency to a waste stream, even if the composition of the stream before treatment was fully identified through monitoring data.

For example, if 40 percent of stack emissions of the

It is important to realize that the accuracy and proficiency of release estimation will improve over time. However, submitters are not required to use new emission factors or estimation techniques to revise previous Form R submissions.

Section 5 Column C: Percent from Stormwater

This column relates only to Section 5.3 - discharges to receiving streams or water bodies. If your facility has monitoring data on the amount of the EPCRA Section 313 chemical in stormwater runoff (including unchanneled runoff), you must include

The amount reported in sections 5.1 and 5.2 are reproduced below for your convenience, from the 2016 ethylene oxide report.
In fact, I have attached a copy of the full Form R for ethylene oxide for your reference so you do not have to look for one.

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR					
4.1	[06] (Enter two-digit code from instruction package.)				
SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ON-SITE					
			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (Enter code)	C. Percent from Stormwater
5.1	Fugitive or non-point air emissions	NA [ ]	16412	O	
5.2	Stack or point air emissions	NA [ ]	60836	O	
5.3	Discharges to receiving streams or water bodies (Enter one name per box)	NA [ ]			
	Stream or Water Body Name	Reach Code (optional)			
5.3.1	NECHES RIVER	12020003000223	0	O	0%

*For Dioxin and Dioxin-like Compounds, report in grams/year
**Range Codes: A=1-10 pounds; B=11-499 pounds; C=500-999 pounds.

Please provide Huntsman's calculations for the above reported amounts in sections 5.1 and 5.2. These calculations should be readily available per 40 C.F.R. 372.10 (Recordkeeping). Because this information should already be in your TRI files, please provide the requested information on or before Monday August 13, 2018.

NOTE: If these calculations are not readily available, this constitutes a violation of 40 C.F.R. 372.10.

Please include a step-by-step description of the calculation steps, and if needed, the reasoning behind any step or selection, e.g. an emission factor or why a certain formula was used.

Should you have any questions regarding this matter, feel free to contact me.
Thank you again for your cooperation in this matter.

Best week's wishes,
Mort Wakeland

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

EPA United States Environmental Protection Agency	FORM R Section 313 of the Emergency Planning and Community Right-to-know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act.	TRI Facility ID Number 77651TXCCHHWY36 Toxic Chemical, Category, or Generic Name Ethylene oxide

WHERE TO SEND COMPLETED FORMS:	1. TRI Data Processing Center P.O. Box 10163 Fairfax, VA 22038	2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

This section only applies if you are revising or withdrawing a previously submitted form, otherwise leave blank:	Revision (Enter up to two code(s)) [ ][ ]	Withdrawal (Enter up to two code(s)) [ ][ ]

Important: See Instructions to determine when "Not Applicable (NA)" boxes should be checked.

Part I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR: 2016

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; attach substantiation forms) [X] NO (Do not answer 2.2; go to Section 3)	2.2 Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "Yes" in 2.1)	

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
Chad Anderson Director of Manufacturing- PNO	Reference Copy: Copy of Record Resides in CDX	2017-06-30

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	77651TXCCHHWY36
Facility or Establishment Name HUNTSMAN PETROCHEMICAL LLC PORT NECHES FACILITY			
Street 6001 HWY 366		Mailing Address (if different from physical street address) PO BOX 847	
City/County/Tribe/State/ZIP Code PORT NECHES / Jefferson / BIA Code: / TX / 77651		City/State/ZIP Code PORT NECHES / TX / 77651	Country (Non-US)

4.2	This report contains information for : (Important: check a or b; check c or d if applicable)	a. [X] An Entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO

4.3	Technical Contact name	ROBERT GRAY	Email Address ROBERT_E_GRAY@HUNTSMAN.COM	Telephone Number (include area code and ext.) 409-724-3533
4.4	Public Contact name	CHAD ANDERSON	Email Address CHAD_ANDERSON@HUNTSMAN.COM	Telephone Number (include area code and ext.) 409-724-4400

4.5	NAICS Code(s) (6 digits)	a. 325199 (Primary)	b.	c.	d.	e.	f.

4.6	Dun and Bradstreet Number(s) (9 digits)
a. 189049570	
b.	

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of U.S. Parent Company (for TRI Reporting purposes)	HUNTSMAN INTERNATIONAL LLC	No U.S. Parent Company (for TRI Reporting purposes) [ ]
5.2	Parent Company's Dun & Bradstreet Number	NA [ ] 147173017	

Printed using TRI-MEweb

*** Do not send to EPA: This is the final copy of your form.***

EPA FORM R PART II. CHEMICAL - SPECIFIC INFORMATION	TRI Facility ID Number 77651TXCCHHWY36 Toxic Chemical, Category, or Generic Name Ethylene oxide

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you are reporting a mixture component in Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 000075218
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Ethylene oxide
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive). NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [X] Produce b. [ ] Import		
If produce or import: c. [X] For on-site use/processing d. [X] For sale/distribution e. [ ] As a byproduct f. [ ] As an impurity	a. [X] As a reactant b. [ ] As a formulation component c. [ ] As an article component d. [ ] Repackaging e. [ ] As an impurity	a. [ ] As a chemical processing aid b. [ ] As a manufacturing aid c. [X] Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1 [06] (Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ON-SITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (Enter code)	C. Percent from Stormwater
5.1	Fugitive or non-point air emissions	NA [ ]	16412	O	
5.2	Stack or point air emissions	NA [ ]	60836	O	
5.3	Discharges to receiving streams or water bodies (Enter one name per box)	NA [ ]			
	Stream or Water Body Name	Reach Code (optional)			
5.3.1	NECHES RIVER	12020003000223	0	O	0%

*For Dioxin and Dioxin-like Compounds, report in grams/year
**Range Codes: A=1-10 pounds; B=11-499 pounds; C=500-999 pounds.

*** Do not send to EPA: This is the final copy of your form.***

EPA FORM R PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)	TRI Facility ID Number 77651TXCCHHWY36 Toxic Chemical, Category, or Generic Name Ethylene oxide

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ON-SITE (Continued)

		NA	A. Total Release (pounds/year*) (Enter range code** or estimate)	B. Basis of Estimate (Enter code)
5.4-5.5	Disposal to land on-site			
5.4.1	Class I Underground Injection wells	[X]		
5.4.2	Class II-V Underground Injection wells	[X]		
5.5.1.A	RCRA subtitle C landfills	[X]		
5.5.1.B	Other landfills	[X]		
5.5.2	Land treatment/application farming	[X]		
5.5.3A	RCRA Subtitle C surface impoundments	[X]		
5.5.3B	Other surface impoundments	[X]		
5.5.4	Other disposal	[X]		

SECTION 6. TRANSFER(S) OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs) NA [X]

*For Dioxin and Dioxin-like Compounds, report in grams/year

**Range Codes: A=1-10 pounds; B=11-499 pounds; C=500-999 pounds.

*** Do not send to EPA: This is the final copy of your form.***

EPA FORM R PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)	TRI Facility ID Number 77651TXCCHHWY36 Toxic Chemical, Category, or Generic Name Ethylene oxide

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS NA [X]

6.2.1 Off-Site EPA Identification Number (RCRA ID No.)	
Off-Site Location Name:	NA
Off-Site Address:	

City		County		State		ZIP		Country (Non-US)	

Is location under control of reporting facility or parent company?	[ ] Yes [ ] No

A. Total Transfer (pounds/year*) (Enter range code** or estimate)	B. Basis of Estimate (Enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (Enter code)

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[ ] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Waste Treatment Efficiency Estimate
7A. 1 a	**7A. 1 b**	**7A. 1 c**
A	2 : A03	E4
7A. 2 a	**7A. 2 b**	**7A. 2 c**
A	2 : H040	E1
7A. 3 a	**7A. 3 b**	**7A. 3 c**
A	2 : A01	E3
7A. 4 a	**7A. 4 b**	**7A. 4 c**
W	2 : H081	E4

*For Dioxin and Dioxin-like Compounds, report in grams/year

**Range Codes: A=1-10 pounds; B=11-499 pounds; C=500-999 pounds.

*** Do not send to EPA: This is the final copy of your form.***

EPA FORM R PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)	TRI Facility ID Number 77651TXCCHHWY36 Toxic Chemical, Category, or Generic Name Ethylene oxide

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[ ] NA - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [Enter 3-character code(s)]

1. U03

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] NA - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [Enter 3-character code(s)]

SECTION 8. SOURCE REDUCTION AND WASTE MANAGEMENT

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
	8.1 - 8.7 Production-Related Waste Managed				
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	45784	77248	77248	77248
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	NA	NA	NA	NA
8.2	Quantity used for energy recovery on-site	24700	19389	19389	19389
8.3	Quantity used for energy recovery off-site	NA	NA	NA	NA
8.4	Quantity recycled on-site	NA	NA	NA	NA
8.5	Quantity recycled off-site	NA	NA	NA	NA
8.6	Quantity treated on-site	137086	171281	171281	171281
8.7	Quantity treated off-site	NA	NA	NA	NA
8.8	Non-production-related waste managed**		NA		
8.9	[ ] Production ratio or [X] Activity ratio (select one and enter value to right)		0.89		
8.10	Did your facility engage in any newly implemented source reduction activities for this chemical during the reporting year? If so, complete the following section; if not, check NA.		NA [X]		

	Source Reduction Activities (Enter code(s))	Methods to Identify Activity (Enter code(s))			Estimated annual reduction (Enter code(s)) (optional)
8.10.1	NA				

*For Dioxin and Dioxin-like Compounds, report in grams/year

** Includes quantities released to the environment or transferred off-site as a result of remedial actions, catastrophic events, or other one-time events not associated with production processes

TRI Facility ID Number
77651TXCCHHWY36
Toxic Chemical, Category, or Generic Name
Ethylene oxide

Additional optional information on source reduction, recycling, or pollution control activities.

Section 8.11: If you wish to submit additional optional information on source reduction, recycling, or pollution control activities, provide it here.	
Topic	Comment

Section 9.1: If you wish to submit any miscellaneous, additional, or optional information regarding your Form R submission, provide it here.	
Topic	Comment

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 4/17/2018 4:03:21 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: FW: 2014 NATA version 2 - DRAFT ethylene oxide point source risks
Attachments: Josh and Cindy spreadsheet NATA V2.xlsx

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Madden, Joshua
Sent: Thursday, April 12, 2018 9:35 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hey Darrin,

Here is a copy of the new spreadsheet. It also includes the name of the parent company for the Houston Plant.

From: Larson, Darrin
Sent: Thursday, April 12, 2018 9:30 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hi Cindy,

I'd love to have a copy of the new spreadsheet when you have it ready.

Thanks!

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Wednesday, April 11, 2018 3:53 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hey, Darrin,

Josh and I worked on this yesterday and put company names to the facilities on the spreadsheet. I don't think he's posted it, he was going to add facility type. He's already signed out for today, and has that info on the version we worked on.
Can we get you an answer tomorrow?
Cindy

From: Larson, Darrin
Sent: Wednesday, April 11, 2018 3:43 PM
To: Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: Re: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Do we know what company operates Houston Plant (no. 54)?

	HOUSTON PLANT	Texas	HOUSTON	06	500	588	34	No	0.3	0.3	max process at facility contributes 87% of emissions from unit type Process Equipment Fugitive Leaks and process Chemical Manufacturing,Fugitive Emissions,General. calc method: USEPA Emission Factor (no Control Efficiency used)	Two of the fugitive release points - including the largest emission release point (ID=30235712; 0.2185 tons is a fugitive with length/width that may have been treated differently in v1 versus v1 (release point treated as southwest corner versus center).	(not HON, MON, OLD, MCM, or Ethylene)

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Thursday, March 15, 2018 6:03 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Bollweg, George <bollweg.george@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Glass, Geoffrey <GLASS.GEOFFREY@EPA.GOV>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Kierys, Dawid <kierys.dawid@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Owens, Katharine <Owens.Katharine@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>;

Stone, William <stone.william@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Berner, Ted <Berner.Ted@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>
Subject: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hello –

You are receiving this email because you are a member of the ATRA EtO group or a NATA Regional Office lead or both. Either way, you know that in version 1 of the 2014 NATA we saw ethylene oxide emissions from point sources driving risks at the census tract level. Since that time, you have reviewed the data, worked with your states to review the data, and provided revisions back to us. We have incorporated those changes from V1 of the 2014 NATA and in preparation for version 2, have re-modeled the EtO-emitting point sources first. This is your first look at those results. **Please remember that risk results are not to be shared outside the Agency**.

The attached pdf document provides: 1) a summary of the events of the emissions review, 2) a regional count of facilities in the attached spreadsheet, and 3) an explanation of the data fields in the attached spreadsheet file. The attached spreadsheet contains a list of facilities that had a census *block* level cancer risk greater than 100-in-1 million in either version 1 (column J) or version 2 (column K). These are all provided so you can see how any data changes impacted the risk results. As you will see, there are still some facilities where we have estimated a census *tract* level cancer risk of greater than 100-in-1 million in version 2. These are indicated with a "Y" in column K. (An exact risk number is not provided because the estimates only take into account the AERMOD modeling; CMAQ is not yet complete so we have not combined the two results and we have given you our best estimate.)

We know that some of you are actively working with your states on the data review. Thank you for your time and effort doing that! There are some columns in the spreadsheet that may help focus your conversations, for example, column N, which provides information on how the EtO emissions were calculated for the process with the most emissions. And, our engineers are also working through their contacts to continue to verify the emissions and other inputs to the modeling. (If you need to contact them, Jennifer (chemical manufacturing) and Jonathan (sterilizers) are in the "CC" field.) There are columns in the spreadsheet to indicate what has been done and what type of changes have been received or are expected. **However, without additional information, there will likely be little change to these results.** If you have received additional info or revisions, please work with Madeleine to get those to us.

As you continue to work through this situation, please let us know if there's anything we can do to help or if there's additional data you need. We are happy to walk through this on the next ATRA call or set up a special purpose call. As always, if you have questions please feel free to contact me, Ted (palma.ted@epa.gov, 919-541-5470), or Madeleine (strum.madeleine@epa.gov, 919-541-2383).

Thank you,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Thompson, Steve [thompson.steve@epa.gov]
Sent: 4/19/2018 2:14:00 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: FW: 2014 NATA -LA facilities emitting ethylene oxide

---

From: Lourdes Iturralde [mailto:Lourdes.Iturralde@LA.GOV]
Sent: Wednesday, April 18, 2018 5:13 PM
To: Thompson, Steve <thompson.steve@epa.gov>
Cc: April Baiamonte <April.Baiamonte@LA.GOV>; ananthakrishnan.gunasekaran@la.gov; Celena Cage <celena.cage@la.gov>; Mike Algero <Michael.Algero@LA.GOV>
Subject: RE: 2014 NATA -LA facilities emitting ethylene oxide

Work with April and Guna

From: Thompson, Steve [mailto:thompson.steve@epa.gov]
Sent: Wednesday, April 18, 2018 5:03 PM
To: Lourdes Iturralde
Subject: Fwd: 2014 NATA -LA facilities emitting ethylene oxide

Who do you want us to work through when coordinating discussions with the facilities?

I sent this list last week to Celena and April.

Sent from my iPhone

Begin forwarded message:

> **From:** "Thompson, Steve" <thompson.steve@epa.gov>
> **Date:** April 13, 2018 at 8:31:16 AM CDT
> **To:** Celena Cage <celena.cage@la.gov>, "April.Baiamonte@LA.GOV" <April.Baiamonte@LA.GOV>
> **Subject: 2014 NATA -LA facilities emitting ethylene oxide**
>
> Here are the LA facilities. We will talk next week about reaching out to facilities.

Facility ID	Facility Name	State	City	Address	EPA Region	V1 EtO emissions (tons)	V2 EtO emissions (tons)
5287111	Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana	Reserve	474 W 19th St	06	2	2

7451011	BCP Ingredients Inc	Louisiana	St. Gabriel	3830 Hwy 30	06	3	3
5504811	Taminco US Inc	Louisiana	St. Gabriel	3790 Hwy 30	06	1	1
7445611	Shell Chemical LP - Geismar Plant	Louisiana	Geismar	7594 Hwy 75	06	5	5
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Louisiana	Westlake	2201 Old Spanish Trail	06	6	6
8465611	BASF Corp - Geismar Site	Louisiana	Geismar	8404 River Rd (Hwy 75)	06	7	7
8467311	The Dow Chemical Co - Louisiana Operations	Louisiana	Plaquemine	21255 Hwy 1	06	2	2
7202911	Union Carbide Corp - St Charles Operations	Louisiana	Taft	355 Hwy 3142 Gate 1	06	15	15

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/10/2018 10:51:02 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
CC: Thompson, Steve [thompson.steve@epa.gov]
Subject: I spoke w/ Jennifer Caparoso - FW: Permits for Huntsman Port Neches

Hi Anupa,

Jennifer Caparoso called me today and said that if you still need the permits she has for Huntsman, just give her a call. I told her that you'd gotten info. from TCEQ and may not need them but that I'd leave that to you. (Btw – she also finds it very hard to find the right permits to get EtO info.) Her number is 919-541-4063.

She wanted to know more about what we're planning to do with the permits and more about what we're saying when we call the facilities. OAQPS is concerned about everyone staying on the same page/message. For the permits, I said we want to see how the permit addresses EtO (emission limits, etc.) and whether the reported emissions exceed the permit limits. For the calls to facilities that we were asked to do, I said you were asking them to confirm their 2014 EI amount. I mentioned that you had 2014, 2015, and 2016 TRI data for some of the facilities and that we were interested in knowing why the amounts went up or down (due to controls? Production decreases/increases? etc.). She said OAQPS is asking regions to limit what we ask about to just confirming the 2014 numbers. She also mentioned that the TRI staff are contacting facilities re: 2017 numbers (see the email Fran forwarded today). Let's talk more about this on Monday.

Steve—she's working on the MON RTR. I mentioned that it seemed like OAQPS would have the expertise/knowledge to help us understand the types of controls that might be available to reduce emissions for different types of facilities, so that as states/regions reach out to facilities, we don't all have invent the wheel. She said this was her understanding as well.

Darrin

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Tuesday, August 07, 2018 4:18 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Subject: RE: Permits for Huntsman Port Neches

Hi Darrin and Anupa –

It is my understanding that we do have *a* permit for Huntsman and I'll let Jennifer speak to which one it is. That may save you one step.

Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG

919.541.2076
smith.darcie@epa.gov

From: Larson, Darrin
Sent: Tuesday, August 07, 2018 12:41 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Langdon, Robin <Langdon.Robin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Permits for Huntsman Port Neches

Hi Darcie,

We're planning to contact Huntsman to get permits for the Port Neches facility, and wanted to check with you first to see if OAQPS might already have them.

Thanks!

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Tuesday, August 07, 2018 10:41 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: permits for Huntsman Port Neches

Darrin,
In order to better understand Huntsman Port Neches operations with respect to ethylene oxide, I would like to get the most current permits that cover any source (fugitive or point source) that emits ethylene oxide. Ideally I would also like to get the emissions calculations behind the emissions inventories or TRI numbers for 2016 and the emissions calculations behind the emissions limits, but I understand we may not want to ask for those right now.

Thanks.

Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 8/9/2018 2:20:42 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
CC: Larson, Darrin [Larson.Darrin@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: Re: CLOSE HOLD: next steps on EtO facilities

Cool. I had notified Darcie about Santa Teresa upgrades and OAQPS call confirmation of upgrades on Friday. She said they would remove from list.

Sent from my iPhone

On Aug 9, 2018, at 8:01 AM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:

> I have not contacted Sasol – I only contacted those 3 facilities that OAQPS asked for the region to contact.
>
> ---
>
> **From:** Verhalen, Frances
> **Sent:** Thursday, August 09, 2018 7:36 AM
> **To:** Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
> **Subject:** RE: CLOSE HOLD: next steps on EtO facilities
>
> Darrin, can you confirm the tonnage and type of source (columns 6 and 9, respectively)? Thanks. Also, I will need to know that Sasol has been contacted to confirm 2014 EI input.
>
> Cindy or I will need to get back to Erica Sasser tomorrow, so all assistance is welcome.
>
> Thank you.
>
> Frances Verhalen, P.E., Chief
> Air Monitoring/Grants Section
> US Environmental Protection Agency
> 1445 Ross Avenue (MC 6MM-AM)
> Dallas, TX 75202
> 214-665-2172
> verhalen.frances@epa.gov
>
> ---
>
> **From:** Verhalen, Frances
> **Sent:** Wednesday, August 08, 2018 4:10 PM
> **To:** Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
> **Subject:** FW: CLOSE HOLD: next steps on EtO facilities
>
> CLOSE HOLD – DO NOT RELEASE
>
> Frances Verhalen, P.E., Chief
> Air Monitoring/Grants Section
> US Environmental Protection Agency
> 1445 Ross Avenue (MC 6MM-AM)

Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Stenger, Wren
Sent: Wednesday, August 08, 2018 3:38 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fwd: CLOSE HOLD: next steps on EtO facilities

Wren Stenger, Director
Multimedia Division

Begin forwarded message:

> **From:** "Perez, Idalia" <Perez.Idalia@epa.gov>
> **Date:** August 7, 2018 at 11:26:00 AM CDT
> **To:** "Moraff, Kenneth" <Moraff.Ken@epa.gov>, "Hamjian, Lynne" <Hamjian.Lynne@epa.gov>, "Conroy, David" <Conroy.Dave@epa.gov>, "Filippelli, John" <Filippelli.John@epa.gov>, "Iglesias, Ariel" <Iglesias.Ariel@epa.gov>, "Fernandez, Cristina" <Fernandez.Cristina@epa.gov>, "Arnold, David" <arnold.david@epa.gov>, "Banister, Beverly" <Banister.Beverly@epa.gov>, "Kemker, Carol" <Kemker.Carol@epa.gov>, "Mitchell, Ken" <Mitchell.Ken@epa.gov>, "Nam, Ed" <nam.ed@epa.gov>, "Furey, Eileen" <furey.eileen@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>, "Smith, Mark A." <Smith.Marka@epa.gov>, "Smith, John" <Smith.John@epa.gov>, "Hestmark, Martin" <Hestmark.Martin@epa.gov>, "Daly, Carl" <Daly.Carl@epa.gov>, "Morales, Monica" <Morales.Monica@epa.gov>, "Wood, MelanieL" <Wood.MelanieL@epa.gov>, "Adams, Elizabeth" <Adams.Elizabeth@epa.gov>, "Lakin, Matt" <Lakin.Matthew@epa.gov>, "Hamlin, Tim" <Hamlin.Tim@epa.gov>, "Hastings, Janis" <Hastings.Janis@epa.gov>
> **Cc:** "Koerber, Mike" <Koerber.Mike@epa.gov>
> **Subject: CLOSE HOLD: next steps on EtO facilities**
>
> ADDs,
> Attached are two documents. Both are **close hold**, please do not share.
>
> 1. Draft list of facilities for discussion on Wednesday's special purpose call.
>
> 2. ATSDR letter mentioned by Region 5 on the last EtO call. Below some contextual information:
>
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> ATSDR's assessment of that question is provided in the attached letter consult. Please keep it close hold. Note their findings and recommendations are specific to the Sterigenics facility in Willowbrook, Illinois.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
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Our mission is to protect human health and the environment.

Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 8/8/2018 9:09:17 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: FW: CLOSE HOLD: next steps on EtO facilities
Attachments: ATSDR Sterigenics EtO Consult Letter-final.pdf; ATT00001.htm; EtO info 080618.docx; ATT00002.htm

CLOSE HOLD – DO NOT RELEASE

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Stenger, Wren
Sent: Wednesday, August 08, 2018 3:38 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fwd: CLOSE HOLD: next steps on EtO facilities

Wren Stenger, Director
Multimedia Division

Begin forwarded message:

> **From:** "Perez, Idalia" <Perez.Idalia@epa.gov>
> **Date:** August 7, 2018 at 11:26:00 AM CDT
> **To:** "Moraff, Kenneth" <Moraff.Ken@epa.gov>, "Hamjian, Lynne" <Hamjian.Lynne@epa.gov>, "Conroy, David" <Conroy.Dave@epa.gov>, "Filippelli, John" <Filippelli.John@epa.gov>, "Iglesias, Ariel" <Iglesias.Ariel@epa.gov>, "Fernandez, Cristina" <Fernandez.Cristina@epa.gov>, "Arnold, David" <arnold.david@epa.gov>, "Banister, Beverly" <Banister.Beverly@epa.gov>, "Kemker, Carol" <Kemker.Carol@epa.gov>, "Mitchell, Ken" <Mitchell.Ken@epa.gov>, "Nam, Ed" <nam.ed@epa.gov>, "Furey, Eileen" <furey.eileen@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>, "Smith, Mark A." <Smith.Marka@epa.gov>, "Smith, John" <Smith.John@epa.gov>, "Hestmark, Martin" <Hestmark.Martin@epa.gov>, "Daly, Carl" <Daly.Carl@epa.gov>, "Morales, Monica" <Morales.Monica@epa.gov>, "Wood, MelanieL" <Wood.MelanieL@epa.gov>, "Adams, Elizabeth" <Adams.Elizabeth@epa.gov>, "Lakin, Matt" <Lakin.Matthew@epa.gov>, "Hamlin, Tim" <Hamlin.Tim@epa.gov>, "Hastings, Janis" <Hastings.Janis@epa.gov>
> **Cc:** "Koerber, Mike" <Koerber.Mike@epa.gov>
> **Subject: CLOSE HOLD: next steps on EtO facilities**
>
> ADDs,
> Attached are two documents. Both are **close hold**, please do not share.
> 1. Draft list of facilities for discussion on Wednesday's special purpose call.
>
> 2. ATSDR letter mentioned by Region 5 on the last EtO call. Below some contextual information:

In June, after conducting modeling and monitoring around an ethylene oxide source (Sterigenics) in the suburbs of Chicago, Region 5 requested that ATSDR review the results and specifically answer the question: If modeled and measured EtO concentrations represent long-term conditions, would they pose a public health problem for people living and working in Willowbrook?

ATSDR's assessment of that question is provided in the attached letter consult. Please keep it close hold. Note their findings and recommendations are specific to the Sterigenics facility in Willowbrook, Illinois.

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Our mission is to protect human health and the environment.

DEPARTMENT OF HEALTH & HUMAN SERVICES
Agency for Toxic Substances and Disease Registry, Region 5

Public Health Service
77 W. Jackson Blvd., Room 413
Chicago, IL 60604

July 26, 2018

Ed Nam
Director, Air and Radiation Division
United States Environmental Protection Agency, Region 5
77 W. Jackson Blvd., MS A-18J
Chicago, IL 60604

Dear Mr. Nam:

Since February 2018, ATSDR has met with U.S. EPA Region 5 Air and Radiation Division (ARD) staff regarding a change in the cancer risk basis for ethylene oxide (EtO) in the EPA Integrated Risk Information System (IRIS) and how that change affects general population risks estimated from EtO-emitting facilities in the draft 2014 National Air Toxics Assessment (NATA) update[1]. In December 2016, IRIS changed EtO's adult-based inhalation unit risk from 0.0001 per microgram per cubic meter ($\mu g/m^3$) to 0.003 per $\mu g/m^3$, a 30-fold increase in cancer potency. It also changed EtO's cancer weight-of-evidence descriptor from "probably carcinogenic to humans" to "carcinogenic to humans". These changes could result in many census tracts having estimated cancer risks that are greater than 1 in 10,000 from EtO exposure identified through the draft NATA modeling of air emissions across the United States.

Specifically, ARD decided to evaluate the implications of this change at two sites, Sterigenics International, Inc. (referred to in the letter as "*Sterigenics*") in Willowbrook, IL and the Elé Corporation in McCook, IL. This letter addresses EtO emissions from the Sterigenics facility. In June 2018, after the monitoring results were received and reviewed, ARD requested that ATSDR review air measurements of EtO and modeling results of EtO emissions from Sterigenics and specifically answer the question: *If modeled and measured ethylene oxide concentrations represent long term conditions, would they pose a public health problem for people living and working in Willowbrook?*

The air modeling data that U.S. EPA provided to ATSDR estimated potential short-term and long-term concentrations of EtO in ambient air surrounding the Sterigenics Corporation. Follow-up air monitoring data confirm the presence of elevated EtO at concentrations within a similar range to those estimated by the air modeling of Sterigenics emissions. Based on these measured and modeled concentrations and the proximity to residences and other commercial structures, cancer risks higher than 1 in 10,000 people may exist for some community members and workers exposed to airborne EtO in this community. If these measured and estimated concentrations represent chronic exposures

[1] The 2014 NATA is expected to be publicly available in the fall of 2018.

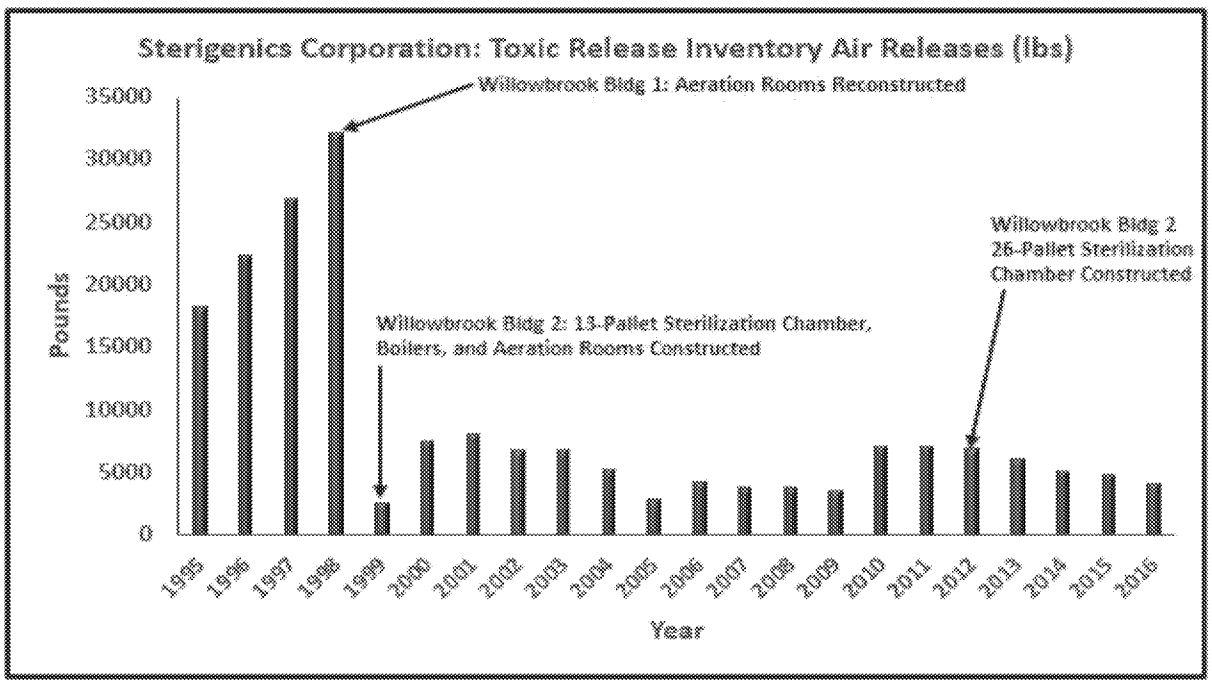
in the surrounding community (with higher exposures likely for workers of the facility), EtO emissions from the Sterigenics Corporation poses a public health hazard.

BACKGROUND

Sterigenics provides sterilization processes using gamma, ethylene oxide, Ebeam, and X-ray sterilization and operates 46 facilities in 13 countries (Sterigenics, 2018). The facility stores ethylene oxide that is sprayed into sealed chambers to sterilize medical equipment, pharmaceuticals, and food/spice products contained on 40" x 48" pallets. The sterilization chambers are contained in two buildings. Building 1 has fifteen chambers that can hold 1 to 13 pallets, while Building 2 has four sterilization chambers that can hold 13 to 26 pallets (Illinois EPA, 2017). Building 1 chambers were constructed in 1984, while Building 2 chambers were built in 1999 and 2012. Pollution control technology includes acid water scrubbers and dry bed reactors that convert the ethylene oxide to ethylene glycol after the sterilization process (Illinois EPA, 2015). Although back vents on the units have historically been uncontrolled, Sterigenics is currently in the process of installing pollution controls to control passive releases (ATSDR, 2018).

Figure 1 illustrates the total reported emissions in pounds per year (lbs/yr) of EtO from Sterigenics.

Figure 1. TRI Total Air Emissions Reported (in pounds), by Sterigenics Corporation for Ethylene Oxide, 1995-2016



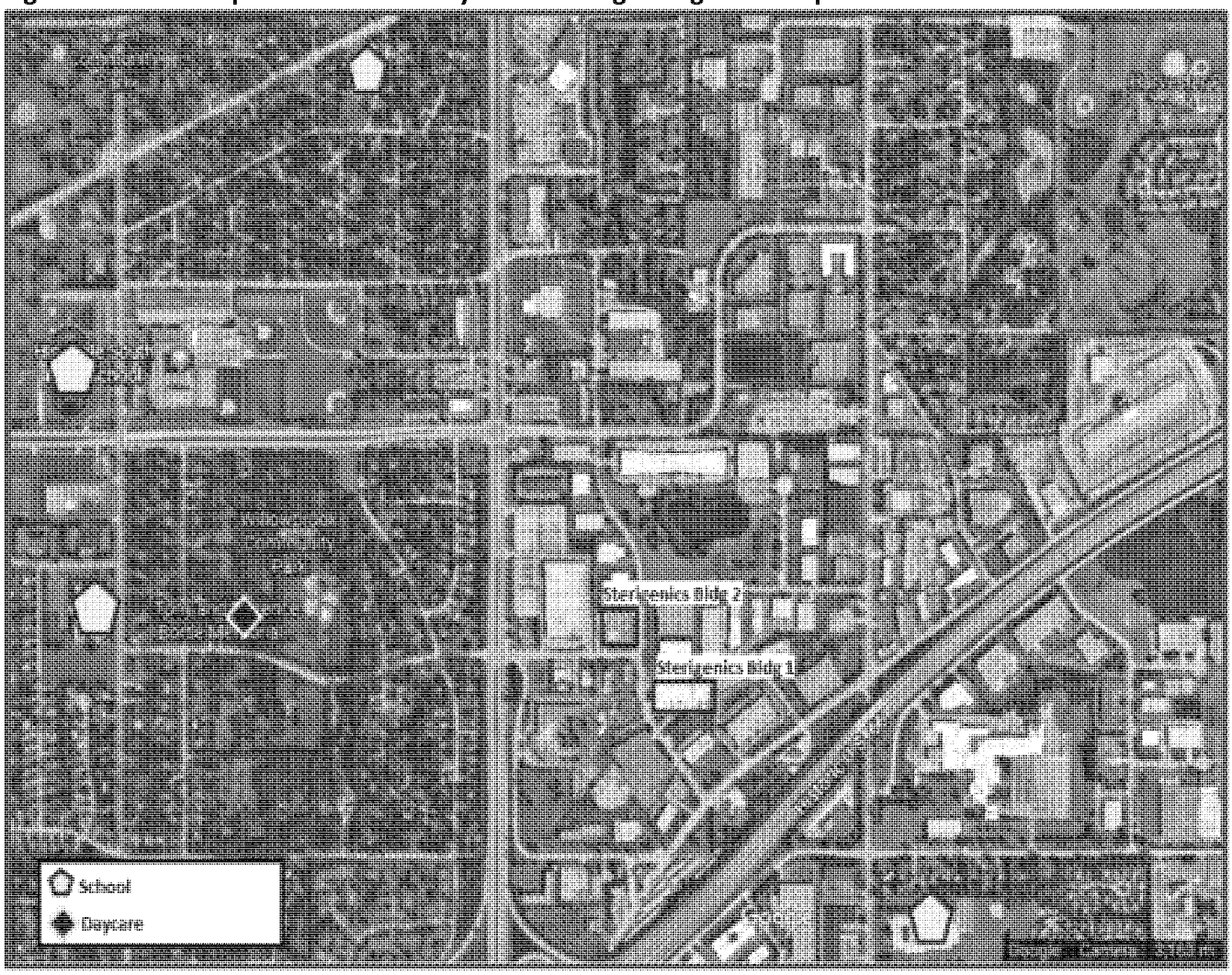
[a]*Source: Toxic Release Inventory (TRI): https://www.epa.gov/enviro/tri-overview*

[b]*Dates for facility constructed and upgrades were identified according to Illinois EPA (2017) DRAFT/PROPOSED Clean Air Act Permit Program (CAAPP) Permit*

The emissions data show a substantial reduction in total air releases after 1998. No data are available before 1995 on ambient air releases, but the available data suggests that substantially higher ambient releases prior to 1995 were likely. The Building 1 sterilization chambers were constructed in 1984, therefore EtO has been emitted over the past 34 years from the Willowbrook facility.

Willowbrook, Illinois is a small suburb of Chicago with approximately 8,500 residents (U.S. Census, 2016). The Willowbrook industrial complex where Sterigenics is located is in a densely populated metropolitan area, with 19,271 people living within 1 mile of the facility boundary. There are four schools and one daycare facility within 1 mile of the facility. According to 2016 Census estimates, Willowbrook residents are predominately white (73.3%), non-Hispanic (66.6%), educated (97.7% graduate high school, and 48.9% graduated with a bachelor's degree or higher), and middle class (median household income was over $67,000 per year). Approximately 18.5% of the population is identified as Asian, and 6.3% as black.

Figure 2. Aerial map of the community surrounding Sterigenics Corporation



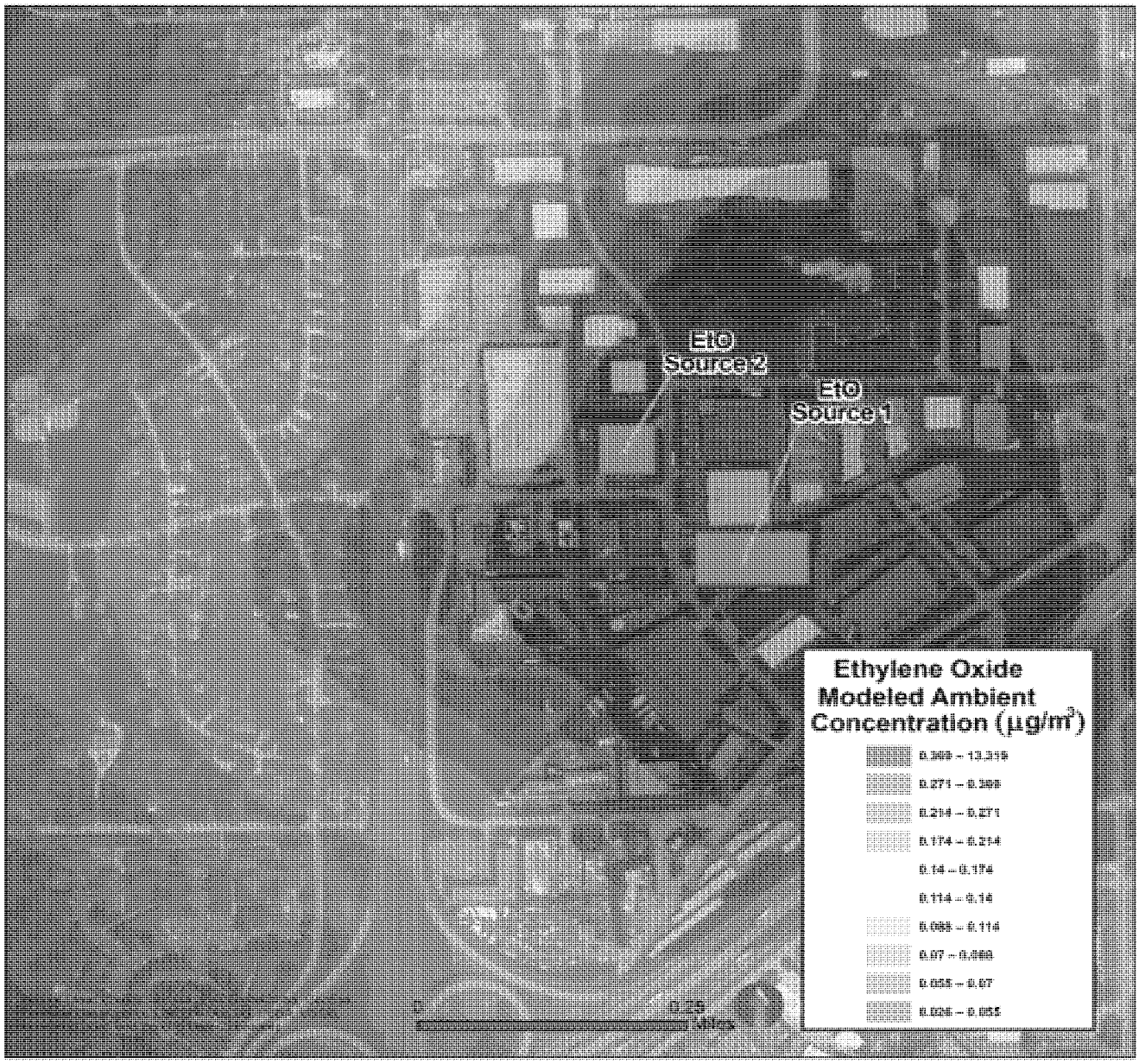
Source: Google Earth

ENVIRONMENTAL DATA

Air Modeling

U.S. EPA modeled short and long-term ambient EtO concentrations (AERMOD version 18081) to evaluate the potential impact of site emissions. These scenarios estimated a 5-year average to represent chronic exposures and maximum 1- and 8-hour averages to represent acute exposures at 882 community receptor points. An overlay of the modeling output is displayed in Figure 3, below. The statistical distributions of the modeled air concentrations are presented in Table 1.

Figure 3. AERMOD modeling output: 5-year average exposure estimates



Source: U.S. EPA Air and Radiation Division, Region 5
Note: Source 1 is Sterigenics Willowbrook Building 1, and Source 2 is Sterigenics Willowbrook Building 2

Table 1. Statistical distribution of EtO modeling*

Statistics	Modeled 1-hour (µg/m³)	Modeled 8-hour (µg/m³)	Modeled 5-year (µg/m³)
Minimum	2.17	1.02	0.03
25th Percentile	4.62	2.26	0.09
50th Percentile	9.72	4.07	0.17
75th Percentile	18.88	7.29	0.31
90th Percentile	33.90	12.62	0.57
95th Percentile	45.22	18.83	0.91
99th Percentile	134.73	61.39	2.97
Maximum	249.77	123.89	13.32
Mean	15.75	6.72	0.32
Geometric Mean	10.13	4.41	0.18

N= 882 modeled receptors

Air Measurements

U.S. EPA collected 39 validated samples May 16th and May 17th, 2018. These samples were collected using SUMMA® canisters, and analyzed using U.S. EPA Compendium Method TO-15, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. A SUMMA® canister is an airtight, stainless-steel container with an inner surface that has been electro-polished and chemically deactivated. The laboratory is required to clean each canister and evacuate it to a high vacuum prior to shipping it to the sampling location. A canister can hold the vacuum for up to 30 days. The air being sampled is "drawn" into the canister by the high vacuum, thus eliminating the need for a pump. While opening the inlet orifice fills the canister in less than a minute, yielding an instantaneous "grab" sample, regulators can be added to the inlet orifice to draw the air into the canister over a designated period, ranging from 1 to 24-hours.

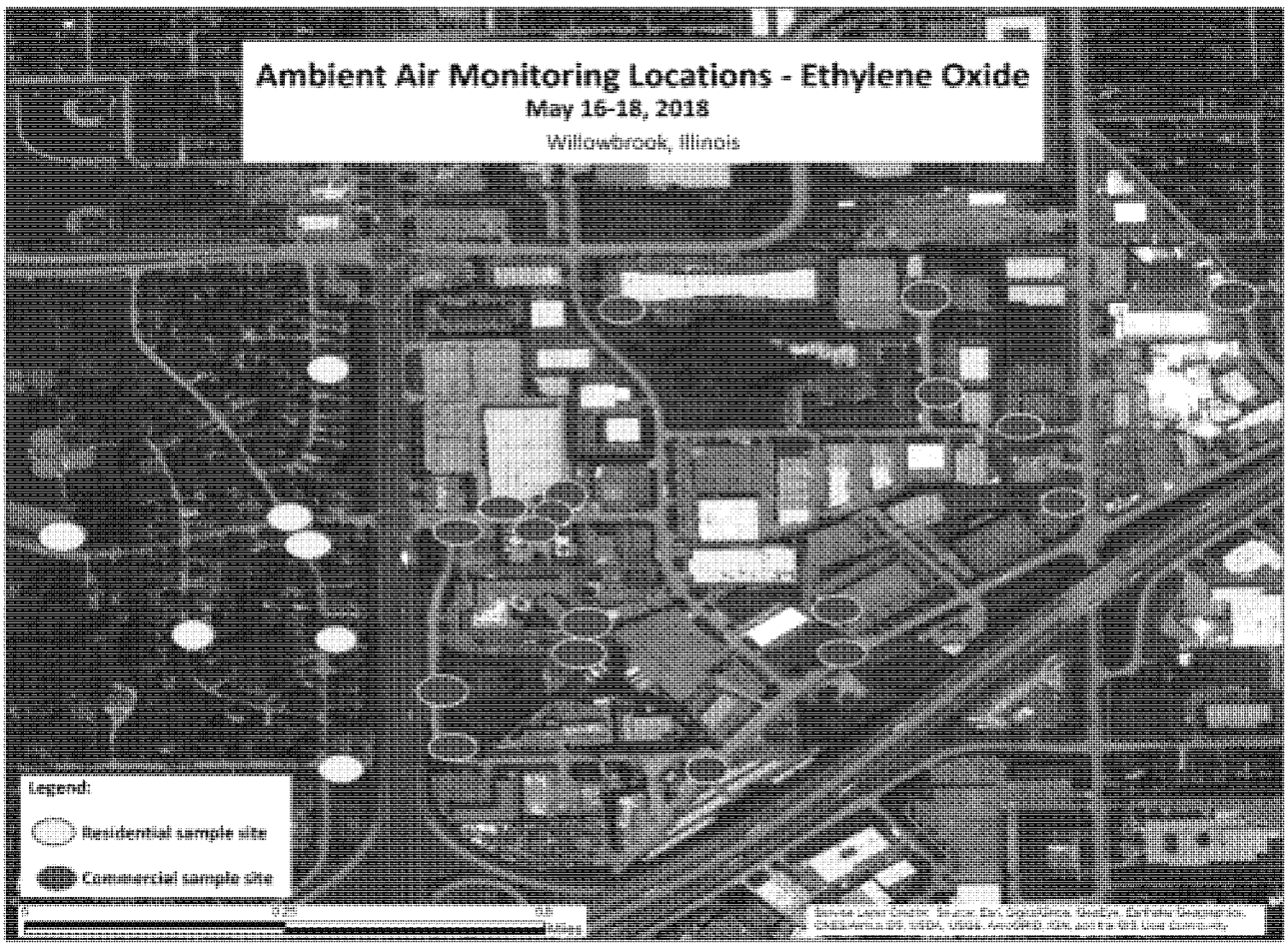
Of the 39 samples collected at 26 discrete locations (Figure 4), 18 were 12-hour samples, and 21 were grab samples (Table 2). Three of the 12-hour samples were collocated duplicates, and three of the grab samples were collocated duplicates. Grab samples generally had lower EtO concentrations than 12-hour averaged samples (U.S. EPA, 2018). However, all grab samples were collected between 10:20 am and 3:05 pm. ARD staff noted that higher EtO concentrations were measured overnight than during the day, and 12-hour samples were collected overnight in some locations. Since Sterigenics is a 24-hour operation, this may be due to calm meteorological conditions overnight with a higher potential for inversions. Given the elevated detections over a limited duration, additional long-term sampling is warranted to better characterize residential exposure to EtO.

Table 2. Statistical distribution of residential and commercial EtO air sampling*

Statistics	Grab samples (µg/m³)	12-hour samples (µg/m³)
Min	0.16	0.34
25th Percentile	0.24	0.69
50th Percentile	0.45	1.56
75th Percentile	1.34	4.39
90th Percentile	2.28	8.26
95th Percentile	4.27	8.44
99th Percentile	4.33	8.96
Max	4.34	9.09
Mean	1.07	3.02
Geo Mean	0.62	1.74

N=21 grab samples, 18 12-hour samples

Figure 4. Ambient air samples near the Sterigenics facility, Willowbrook, IL



Source: U.S. EPA, Region 5

Figure 4, shows the location of discrete samples collected in the community. Given limited measured data presented in Table 2, ATSDR used the maximum 12-hour residential sample concentration and the maximum 12-hour commercial sample concentration to represent chronic upper bound residential (2.1 μg/m^3) and occupational (9.1 μg/m^3) exposures in the community. These concentrations represent maximums identified during a very temporally and spatially limited sampling campaign and actual average long-term exposures may be higher or lower.

HEALTH IMPLICATIONS

Overview for identifying contaminants of concern and evaluating risk

To evaluate EtO exposures near Sterigenics, ATSDR considered its own health-based comparison values as well as those published by other agencies. ATSDR uses comparison values for screening purposes to determine whether a pollutant should be evaluated further. A CV was identified for both an intermediate exposure duration (for non-cancer evaluation) as well as for a long-term (chronic) exposure duration (for which we considered both cancer and non-cancer health effects). In this evaluation, the air sampling results were compared to the ATSDR Cancer Risk Evaluation Guide (CREG) and environmental media evaluation guide (EMEG) and California EPA Reference Exposure Level (REL) for EtO.

- ***ATSDR CREGs*** are estimates of the concentrations of a carcinogen at which there is an elevated risk for one additional case of cancer in one million people exposed over a lifetime. ATSDR's CREG for EtO is calculated from the current U.S. EPA's adult-based inhalation unit risk value (0.003 (μg/m^3)$^{-1}$) and is based on U.S. EPA evaluations and assumptions about hypothetical cancer risks at low levels of exposure. ATSDR's CREG for EtO is 0.00021 μg/m^3.
- ***ATSDR inhalation minimal risk levels (MRL)/EMEGs*** are estimates of the concentrations of pollutants calculated that anyone could be exposed to where health effects are unlikely, based on chronic, intermediate, and acute exposures (those occurring longer than 365 days, between 14-365 days, and 14 days of exposure or less, respectively). For EtO, ATSDR only has an intermediate EMEG of 160 μg/m^3 (ATSDR, 1990).
- ***California RELs*** are concentrations that are unlikely to result in adverse non-cancer health effects. The chronic California REL for EtO is 30 μg/m^3 (California EPA, 2008).

All 5-year modeled and 12-hour measured averages exceeded the ATSDR CREG. Only maximum modeled concentrations exceeded intermediate or chronic non-cancer screening values. The following sections evaluate chronic non-cancer and cancer risks further.

Ethylene oxide properties

Ethylene oxide is a highly flammable gas that is highly reactive with nucleophilic substances such as water, alcohols, halides, amines, and sulfhydryl compounds. It is used as an intermediate in the production of ethylene glycol and surfactants as well as a fumigant for sterilizing foods and heat-sensitive medical equipment.

EtO is highly reactive, readily absorbed, and easily distributed in the human body. The absolute odor threshold has been reported in several studies to be about 470 milligrams per cubic meter (mg/m^3)

(or 470,000 μg/m^3), with acute health effects possible in the range of the odor threshold (NRC, 2010). Chronic exposures can result somatic cell damage at much lower concentrations (California EPA, 2008). EtO is mutagenic and causes chromosome damage in many species, including humans. EtO exposure has widely been studied in scientific literature and its adverse health impacts are well understood. The carcinogenic effects of EtO have been documented in human and animal studies (U.S. EPA 2016).

Acute and intermediate exposure and health effects

Acute and intermediate effects have mostly been documented in hospital workers or in other occupational settings that include sterilizing chambers. Short-term exposure (minutes to weeks or months) above the odor threshold of 470 mg/m^3 (into the thousands of mg/m^3) include primarily neurological effects (headache, dizziness, nausea, lethargy, fatigue, muscle weakness, numbness, memory loss, incoordination, etc.), respiratory irritation (irritation of the nasal cavity, sinuses, coughing, shortness of breath, wheezing, and bronchial constriction and hyperreactivity), excessive thirst and dry mouth, and gastrointestinal effects (vomiting, diarrhea, stomach spasms, etc.). Some studies reported skin rashes with short-term exposures (NRC, 2010).

All studies with documented health effects summarized above had substantially higher EtO concentrations than what was observed in measured and modeled data in this assessment. ATSDR does not have an acute health-based comparison value but does have an intermediate-duration health-based comparison value of 160 μg/m^3. No measured data and only the maximum 1-hour modeled concentration of EtO exceeded this value and modeled and measured concentrations of EtO in this investigation were well below the odor threshold. Thus, it is unlikely that the non-cancer health effects noted above would occur in the general or off-site worker populations.

Chronic exposure and health effects

Cancer effects

The U.S. EPA IRIS released an "Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide" in December 2016. This evaluation summarizes the evidence that EtO is "carcinogenic to humans" through a mutagenic mode of action (MOA) and derives an inhalation unit risk value for EtO (U.S. EPA, 2016). Many studies have identified the genotoxic potential and mutagenic mode of action of EtO exposure via inhalation. There is clear evidence from multiple studies that EtO causes chromosomal aberrations, sister chromatic exchanges, and micronuclei in peripheral blood lymphocytes and bone marrow cells. Chromosomal aberrations and micronucleus frequency have been linked to increased risk of cancer in a number of large human studies (Jinot et al., 2017). Mice and rats exposed to EtO demonstrate cancers of the lymphohematopoietic system (cells involved in the production of lymphocytes and cells of blood, bone marrow, spleen, lymph nodes, and thymus), brain, lung, connective tissue, uterus, and mammary gland.

In humans, an increased incidence and mortality of breast and lymphohematopoietic system cancers have been observed in workers in the EtO manufacturing and in sterilizing facilities (U.S. EPA, 2016). U.S. EPA identified six studies evaluating breast cancer in women, with the largest being a study from the National Institute of Occupational Safety and Health (NIOSH) of over 18,000 workers (45% male, 55% female) in 14 commercial sterilization plants. The NIOSH study reported statistically significant

exposure-response relationships for breast cancer incidence and mortality (Steenland et al., 2004 and Steenland et al., 2004). From assessing these studies, U.S. EPA (2016) determined that there is sufficient evidence of a causal relationship between EtO exposure and breast cancer in women.

U.S. EPA used the cancer incidence data from the NIOSH study, using individual exposure estimates for 17,530 workers from 13 plants, to calculate an inhalation unit risk value. A linear low-dose extrapolation of the lowest effective concentration (LEC; defined here as the lower 95% confidence limit on the EC_{01}, the estimated effective concentration associated with 1% extra risk) for lymphoid cancer was calculated as 2.9×10^{-3} per $\mu g/m^3$. Using the same approach, the lifetime unit risk for breast cancer was calculated as 8.1×10^{-4} per $\mu g/m^3$. Combining the risk for lymphoid and breast cancers in females U.S. EPA adopted an inhalation unit risk of 2.99×10^{-3} per $\mu g/m^3$ (rounded to 3.0×10^{-3} per $\mu g/m^3$). These adult-exposure only unit risk estimates were then rescaled to a lifetime, using age-dependent adjustment factors (ADAF). ADAFs are used to incorporate the greater risk of early life exposure to chemicals that have a mutagenic MOA. When applying the ADAFs, EPA calculated an inhalation unit risk value over a 70-year lifetime of 5.0×10^{-3} per $\mu g/m^3$ (U.S. EPA, 2016). Cancer risk from measured and modeled EtO concentrations are estimated by multiplying the IUR by the EtO concentrations.

U.S. EPA Cancer Risk Estimates Reviewed by ATSDR

U.S. EPA Region 5 air modelers estimated cancer risk assuming a 70-year lifetime from measured and modeled data. Based on modeled EtO concentrations at over 882 specific locations around the Sterigenics facility, U.S. EPA used the 5-year average EtO concentrations to calculate lifetime cancer risks between 1.3×10^{-4} to 6.7×10^{-2}, with a geometric mean risk of 9.1×10^{-4}. Even though cancer risks are not generally calculated for short term exposures, the estimated cancer risks associated with the *measured* EtO air concentration (19 samples collected for 12 hours each) were similar (range: 7.9×10^{-4} to 4.5×10^{-2}, geometric mean: 7.7×10^{-3}; Table 3). Note that these cancer risks were calculated using the lifetime ADAF-adjusted IUR of 5.0×10^{-3} per $\mu g/m^3$.

Table 3. Range of measured and modeled EtO concentrations: U.S. EPA Cancer Risk Estimates

Statistics	Modeled 5-year ($\mu g/m^3$)	Modeled cancer risk range	12-hour samples ($\mu g/m^3$)	Measured cancer risk range*
Minimum	0.03	1.3E-04	0.16	7.9E-04
Maximum	13.32	6.7E-02	4.34	4.5E-02
Mean	0.32	1.6E-03	1.04	1.4E-02
Geometric Mean	0.18	9.1E-04	0.61	7.7E-03

**Cancer risk was calculated to estimate what long term exposures to the 12-hour concentration could look like if sustained long term and does not represent actual exposures.*

Cancer Risk Estimates Calculated by ATSDR

For ATSDR assessments, the reasonable maximum exposure (RME) scenario for residential exposure duration is 33 years over a lifetime of 78 years, so ATSDR calculated an IUR based on 33-year residential exposure using ADAFs. As mentioned previously, ATSDR's RME exposure point concentration (EPC) of 2.1 $\mu g/m^3$ was used as a reasonable estimate of exposure for the most exposed individual in the community. This EPC is the maximum residential sample concentration of EtO in the May 2018 data collection period. Given these assumptions, the cancer risk for this residential sample

location is **6.4 x 10^{-3}**—an additional lifetime risk of 6.4 cancers in a population of 1,000 residents who could be exposed to EtO emissions from Sterigenics. This cancer risk exceeds U.S. EPA's decision-making cancer risk range of 1.0 x 10^{-6} to 1.0 x 10^{-4}, and adds to the lifetime background cancer risk of an average American of 1 in 3 people (American Cancer Society, 2018).

Table 4. Site-specific ADAF calculations for residential exposure*

Age Range	ADAF	U.S. EPA unadjusted IUR	EPC (µg/m³)	Duration Adjustment	Partial Risk
0 to <2 yrs	10	2.99 x 10^{-3}	2.1	2 years/78 years	1.6 x 10^{-3}
2 to <16 yrs	3	2.99 x 10^{-3}	2.1	14 years/78 years	3.4 x 10^{-3}
16 to 33 yrs	3	2.99 x 10^{-3}	2.1	17 years/78 years	1.4 x 10^{-3}
				Lifetime Risk	**6.4 x 10^{-3}**

**Cancer risk was calculated to estimate what long term exposures to the 12-hour concentration could look like if sustained long term and does not represent actual exposures.*

Likewise, ATSDR assumed the maximum commercial 12-hour sample concentration in commercial sample locations of 9.1 µg/m³ to represent RME occupational exposures to workers in nearby facilities. Note that workers at the Sterigenics facility would be covered under the Occupational Safety and Health Administration (OSHA) EtO standard (29 CFR 1910.1047). For the off-site worker scenario, ATSDR assumed an 8.5-hour workday, 250 days a year, for 25 years (ATSDR, 2016), yielding an exposure factor (EF) of 0.08.

$$EF_{cancer,\ chronic} = \frac{8.5\frac{hr}{d} x\ 5\frac{d}{wk} x\ 50\frac{wk}{yr} x\ 25\ yr}{24\frac{hr}{d} x\ 7\frac{d}{wk} x\ 52.14\frac{wk}{yr} x\ 78\ yr} = 0.08$$

Cancer risk for workers can be calculated by multiplying the long-term air concentration by the IUR, adjusting the duration of exposure as appropriate using the exposure factor calculation, above:

$$Cancer\ risk = IUR\ x\ EPC\ (\mu g/m^3)\ x\ EF$$

For the maximum commercial concentration of 9.1 µg/m³, this risk equation yields a lifetime occupational cancer risk of 2.1 x 10^{-3}, or an increased risk of cancer for 2.1 people in a population of 1,000 workers from chronic exposures to Sterigenics emissions:

$$Cancer\ risk_{occupational} = 0.00299\ x\ 9.1\ \mu g/m^3\ x\ 0.08 = \mathbf{2.1\ x\ 10^{-3}}$$

While a more complete database from which to characterize exposure is preferable, we used U.S. EPA's limited data for the Sterigenics investigation and applied the standard ATSDR evaluation process. Note that in both ATSDR calculations, we made a very conservative assumption that a 12-hour sample represents long term exposure. We felt this assumption was warranted because the measured and modeled concentrations demonstrated consistency and provided support that this range of exposure is possible in the area surrounding Sterigenics.

Non-cancer effects

Workers exposed to ethylene oxide over a long-term duration experienced similar health effects to those exposed over shorter durations (California EPA, 2008). Workers exposed to levels of EtO at 8,500 $\mu g/m^3$ and higher over an average of 5-6.5 years demonstrated cognitive and motor impairment compared to unexposed controls. At lower levels of EtO exposure (145-300 $\mu g/m^3$), studies have shown evidence of hemoglobin adducts, DNA damage effects (i.e. sister chromatid exchanges), and hematological effects (i.e. increases in leukocytes and decreases in neutrophil counts; decreases in hematocrit and hemoglobin) (California EPA, 2008). No measured EtO concentrations from the residential or occupational sampling approached or exceeded effect levels in the long-term modeling estimates or the 12-hour samples being used as chronic exposure surrogates, therefore, non-cancer health effects are not expected. However, air sampling in this effort was extremely limited.

LIMITATIONS

ATSDR made several assumptions as part of this assessment that could lead to the over or underestimation of risk. Some limitations of this assessment include:

1. To calculate risks, ATSDR assumed that the concentrations measured during this assessment will continue, unchanged if no actions are taken, over 33 years for residents, and 25 years for workers.
2. ATSDR assumed that the very limited sampling investigation of 26 discrete locations over 2 days throughout the community represents typical exposure conditions from Sterigenics EtO emissions. Only one 12-hour residential sample was collected, and that sample was used to represent the RME residential chronic exposure estimate. EtO concentrations from grab samples at one other residential location were slightly higher than the 12-hour averaged sample collected at this property.
3. ATSDR assumed that the highest EtO concentration in the commercial area surrounding Sterigenics represents worst case off-site worker exposures. This is likely underestimating worker exposures for some employees in this area.
4. Due to a lack of long term sampling, the temporal trends of EtO emissions could not be evaluated. Fluctuations of seasons that affect temperatures, barometric pressure, wind speed and direction, and other potential factors that could influence the transport of EtO into the surrounding community were not assessed.

Despite these limitations, ATSDR acknowledges that the U.S. EPA modeling demonstrates similar concentration ranges to community air measurements. Thus, ATSDR believes the exposure estimates assumed in this assessment are reasonable. Historical emissions were higher before a substantial drop in 1999 with the construction of aeration rooms in Building 1. EtO cancer risks may have been substantially greater for the 14 years the facility operated before these emission controls were implemented, but historical risk cannot be evaluated with available emissions data.

Conclusions:

U.S. EPA asked ATSDR to answer the following question: *"If modeled and measured ethylene oxide concentrations represent long term conditions, would they pose a public health problem for people living and working in Willowbrook?"* U.S. EPA provided modeled and measured data for ATSDR to evaluate and render a health opinion.

It is ATSDR's conclusion that the data U.S. EPA provided suggests that residents and workers are exposed to elevated airborne EtO concentrations from facility emissions. It is difficult to assess long-term public health implications from facility emissions because there has been no historical air monitoring in the community. ATSDR assumed that these data represent long term exposures for area residents and workers. Specifically, ATSDR concludes the following:

1) If measured and modeled data represent typical EtO ambient concentrations in ambient air, *an elevated cancer risk exists* for residents and off-site workers in the Willowbrook community surrounding the Sterigenics facility. These elevated risks *present a public health hazard to these populations*.
2) Measured and modeled ethylene oxide concentrations in ambient air indicate that non-cancer health effects are unlikely for residents and off-site workers in the Willowbrook community surrounding the Sterigenics facility.

Recommendations:

1) ATSDR recommends that Sterigenics take immediate action to reduce EtO emissions at this facility.
2) ATSDR recommends that U.S. EPA work with the Sterigenics facility to initiate long-term air monitoring as soon as possible to measure ambient air levels of EtO. Ongoing air monitoring can demonstrate the effectiveness of actions taken by the company to reduce emissions and subsequent exposures in the community.
3) ATSDR recommends that IDPH investigate whether there are elevated cancers in the population surrounding the Sterigenics facility that are consistent with those associated with chronic EtO exposures.

Please do not hesitate to contact ATSDR Region 5 to discuss this assessment further or to request further public health assistance.

Sincerely,

Michelle Colledge, MPH, PhD
Environmental Health Scientist
Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations
Central Branch, Region 5

CC:
Ken Runkle, IDPH
Aaron Martin, IDPH
Kathryn Siegel, U.S. EPA
Margaret Sieffert, U.S. EPA
Alexis Cain, U.S. EPA
Mark Johnson, ATSDR/ DCHI/CB
Rick Gillig, ATSDR/ DCHI/CB
Tina Forrester, ATSDR/ DCHI/OD

References:

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Agency for Toxic Substances and Disease Registry (ATSDR). 2016. Exposure Dose Guidance for Determining Life Expectancy and Exposure Factor. Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

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Steenland, K., Stayner, L., Greife, A., Halperin, W., Hayes, R., Hornung, R., Nowlin, S. 1991. Mortality among workers exposed to ethylene oxide. *N Engl J Med*. 324:1402–1407.

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Message

From: Madden, Joshua [madden.joshua@epa.gov]
Sent: 8/13/2018 4:17:06 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
CC: Parker, Cindy [parker.cindy@epa.gov]
Subject: NATA Facility List
Attachments: Copy of Copy of Facility checklist_Aug13.edit1.xlsx

Hi Anupa,

Cindy asked me to check with you to see where we are with our facilities and if any had gotten back to you yet. Also here is the latest spreadsheet with facilities of concern. Thanks!

Joshua Madden
Life Scientist
Air Monitoring & Grants Section (6MM-AM)
USEPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
(p) 214-665-7151

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/14/2018 1:05:49 PM
To: Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]
CC: Donaldson, Guy [Donaldson.Guy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

Here is info on our Sterigenics location in New Mexico.

From: Donaldson, Guy
Sent: Monday, July 30, 2018 7:53 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

FYI,

I reached out to NMED who confirmed the reductions at sterigenics.

From: Baca, Michael, NMENV [mailto:michael.baca1@state.nm.us]
Sent: Friday, July 27, 2018 10:17 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Hi Guy,

I spoke with the permit writer and the confirmed that the facility installed new equipment in 2015. They think the emission reductions were a result of the modification to the facility.

Thanks,

Mike

From: Donaldson, Guy <Donaldson.Guy@epa.gov>
Sent: Thursday, July 26, 2018 12:39 PM
To: Baca, Michael, NMENV <michael.baca1@state.nm.us>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Michael if you get a chance can you give me a call at 214-665-7242 regarding the Sterigenics facility in Santa Theresa.

You may or may not have heard, risk numbers associated with Ethylene Oxide have changed significantly and as a result, some of the Ethylene Oxide sources are showing up now in the coming National Air Toxics assessment.

We think based on the TRI data below and some permit info as well that the Sterigenics facility has reduced its emissions significantly and I just wanted to confirm that NMED is seeing the same thing.

From: Larson, Darrin
Sent: Thursday, July 26, 2018 1:02 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Monday, July 16, 2018 12:28 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

See the data from Mort. Point source emissions did go down from 2014.

From: Wakeland, Morton
Sent: Monday, July 16, 2018 12:18 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Stuckey, Troy <Stuckey.Troy@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Good afternoon Anupa

I was out most of last week, so am just getting back to this.

If this is the correct site in NM…

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:	STERIGENICS-SANTA TERESA FACILITY	Mailing Name:	STERIGENICS-SANTA TERESA FACILITY
Address:	2400 AIRPORT RD SANTA TERESA NM 88008	Mailing Address:	2015 SPRING ROAD, SUITE 650 OAK BROOK IL 60523
County:	DONA ANA	Region:	6
Facility Information:	View Facility Information	TRI ID:	88008GRFFT2400A
DUNS Number:	361309719	FRS ID	110000472541
TRI Preferred Latitude:	31.861111	TRI Preferred Longitude:	106.6875
Public Contact:	KATHLEEN HOFFMAN	Phone:	6309281758
Assigned Public Contact:	KATHLEEN HOFFMAN		
Parent Company:	STERIGENICS US LLC	Standardized Parent Company:	STERIGENICS US LLC
BIA Tribal Code:		Tribe:	

Parent DUNS: 098499569

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2016

NAICS CODE	PRIMARY	NAICS DESCRIPTION
561910	YES	Packaging and Labeling Services

Then here are the stack (point) and fugitive emissions for ethylene oxide – I see there are no reports for 2017, is site still active?

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.

Chemical Name	Media	Unit Of Measure	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR FUG	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR STACK	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR FUG	Pounds	508	537	505	517	564	528	518	506	506	460	484	386	303	271	211	211	196	800	890	850	400	250
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR STACK	Pounds	459	466	5256	9565	11798	12540	11903	10979	14933	13562	14275	11371	6816	6481	4816	4833	4479	4520	5100	260	240	250
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR FUG	Pounds	5.6	7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR STACK	Pounds	5	8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0

If you need in an Excel worksheet vs screen shot, let me know.

Best week's wishes,
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 8:37 AM

To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Thank you.

From: Wakeland, Morton
Sent: Friday, July 13, 2018 8:06 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

am just back in Friday – out all week, may have to leave in a few…will try to get to
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Yurk, Jeffrey
Sent: Thursday, July 12, 2018 12:48 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Mort: Can you help Anupa out with ethylene oxide air emissions from TRI requested below for Sterginics in New Mexico?

Thanks,

Jeff

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 12:44 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: 2014/2016 EtO emissions from Sterginics in NM?

Hi Jeff,
Steve Thompson is asking if the EtO emissions in TRI have been reduced by 83% in 2016 vs 2014. If you send the emissions for those 2 yrs, I can do the calc.

Thank you,
Anupa

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/14/2018 8:58:32 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: double check for LA

Thank you.

From: Smith, Darcie
Sent: Tuesday, August 14, 2018 3:57 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: double check for LA

Yes.

Idalia sent out the original slides, which did not have the correction. There was also an error for regions 2&3.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Monday, August 13, 2018 4:39 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: double check for LA

Darcie,
On today's ADD call, the incorrect version of the slide below was used. Sasol was not on that slide, but it is on this corrected version below. Is Sasol one of the facilities we should be contacting by the Wednesday deadline to verify their emissions?
Thanks
Cindy

From: Madden, Joshua
Sent: Monday, August 13, 2018 1:59 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: FW: double check for LA

From: Smith, Darcie
Sent: Tuesday, July 31, 2018 9:25 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: double check for LA

Fyi – I made a new slide for you, just in case they get used again, although I don't think they will…

2014 NATA Version 2

Facilities in Region 6 (LA) w/ Elevated Risks

MSA Area Name (City, State)	Facility Name	Type of Facility	Potentially Applicable MACT Associated with EtO Emissions	Review
New Orleans-Metairie, LA (LaPlace, LA)*	Denka	Chemical plant	NA – P&R I	NA
New Orleans-Metairie, LA (New Hampton, LA)	BCP Ingredients	Chemical plant	NA – area	Facility - no changes
New Orleans-Metairie, LA (Hahnville, LA)	Union Carbide St. Charles	Chemical plant	HON	Facility – emissions changes for a flare
New Orleans-Metairie, LA (Reserve)	Air Products Reserve Plant (Evonik)	Chemical plant	NA – area	LA DEQ - no changes
Lake Charles, LA (Westlake)	Sasol Chemicals (USA) LLC – Lake Charles Chemical Complex	Chemical plant	HON	Corporate – no changes
Baton Rouge, LA (St. Gabriel, LA)	Taminco – St Gabriel Plant	Chemical plant	NA – area	LA DEQ - no changes

* For the LaPlace, LA area the primary risks are driven by emissions of chloroprene.

9

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Smith, Darcie
Sent: Monday, July 30, 2018 1:49 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: double check for LA

Fyi

Josh – you were right, see Ted's note below.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Palma, Ted
Sent: Monday, July 30, 2018 1:47 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: double check for LA

The facility that is driving the 2 census tracts in Lake Charles LA is 8468011 Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex Louisiana Westlake 2201 Old Spanish Trail

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Smith, Darcie
Sent: Friday, July 27, 2018 2:54 PM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: double check for LA

Hi Ted –

I have two questions for you.

First, can you please double check for me the name of the facility in the Lake Charles, LA MSA area that is driving the EtO risk?

Secondly, there is a facility – 5287111 – in Reserve, LA (which is in St. Charles Parish), the Air Products Performance Manufacturing Inc Reserve Plant. Can you please let me know what its tract risk is?

It is possible that I mixed up the two and it is possible that we left one off the list. I'm trying to help Fran figure out which is right.

Thanks!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/14/2018 9:01:07 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: double check for LA

Hi Darcie,

We know that adding Sasol changed the overall total from 21 to 22 (based on the 7/24/18 slides that the ADDs used in the discussion yesterday). Did the R2 and R3 errors affect the overall number also?

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Tuesday, August 14, 2018 3:57 PM
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Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: double check for LA

Yes.

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Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

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Thanks
Cindy

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* For the LaPlace, LA area the primary risks are driven by emissions of chloroprene.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

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To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: double check for LA

Fyi

Josh – you were right, see Ted's note below.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Palma, Ted
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To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: double check for LA

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Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Smith, Darcie
Sent: Friday, July 27, 2018 2:54 PM
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It is possible that I mixed up the two and it is possible that we left one off the list. I'm trying to help Fran figure out which is right.

Thanks!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 5/1/2018 1:49:01 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: BCP response for EtO

Thank you, I'll pass it along to the appropriate people.

From: Ahuja, Anupa
Sent: Tuesday, May 01, 2018 8:47 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: BCP response for EtO

Hi Cindy,
Below is BCP's response. Would you please send it to all of the appropriate people? Since there are no changes the state's data does not need to be updated.

Thanks.

From: Tod Viso [mailto:TViso@BALCHEM.COM]
Sent: Tuesday, May 01, 2018 8:39 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: 2014 TRI data review

Ahuja,

Good talking with you this morning. Per our discussion, I have reviewed the 2014 data and see no further changes needed. In 2014, the calculation was updated for the number of connectors and this update was submitted when filing that data in 2015. Let me know if you need anything else.

Thanks,

Tod Viso
Plant Manager | BCP Ingredients, Inc.
3830 Highway 30 | St. Gabriel, LA 70776
[P] 225-255-4889 x2302 [C] 225-236-7205
www.Balchem.com

Message

From: Madden, Joshua [madden.joshua@epa.gov]
Sent: 8/15/2018 2:37:56 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: LDEQNATA Q&A.docx

Lean something new everyday!

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 9:20 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

EtO is a feedstock in the process to produce choline chloride.

From: Donaldson, Guy
Sent: Wednesday, August 15, 2018 9:17 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Meaning they manufacture choline chloride? So wrong to classify as a sterilizer?

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 9:15 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

BCP's plant in St. Gabriel is a choline chloride plant. The emissions are all fugitives.

From: Parker, Cindy
Sent: Wednesday, August 15, 2018 9:07 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: LDEQNATA Q&A.docx

Guy,
BCP is also listed as an Area source, but does have 2.5t, so we will check into this further, once we get this latest firedrill taken care of.
Cindy

From: Smith, Darcie
Sent: Wednesday, August 15, 2018 8:12 AM
To: Parker, Cindy <parker.cindy@epa.gov>

Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

You guys can call me anytime. I like grey t-shirts ☺

I would go with what you know of the facility's rule applicability/type/operations/etc. That was our best attempt at sorting them into different bins. If you know better, go with that certainly. It also could be an area source, which potentially wouldn't be subject to the sterilizer MACT, which I think has a 1 tpy emissions rate to be included.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Wednesday, August 15, 2018 8:55 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: LDEQNATA Q&A.docx

Darcie,
There is some confusion here about our BCP Ingredients facility. It is listed as a sterilizer, but not subject to MACT, etc. Is that a mistake, or is there some reason it's not subject to the alphabet soup? We read that they sterilize foodstuffs – spices, dog food, etc.
Thanks for your attention to this. Between the numbers of facilities shifting on various versions of spreadsheets, and things like this, there's a lot of confusion here –
Thank you.
Cindy and Josh
PS, we are looking into getting 'Call Darcie' tshirts!! So sorry we bug you a lot..... ☺

From: Donaldson, Guy
Sent: Wednesday, August 15, 2018 7:45 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Exactly, that's what confuses me.

From: Larson, Darrin
Sent: Wednesday, August 15, 2018 7:43 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

The OAQPS spreadsheet describes it as a sterilizer, but the notes indicate that it's not subject to HON, MON, MCM, or ethylene MACT.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6

Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Wednesday, August 15, 2018 7:26 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Good question, we will check. There is another BCP Ingredients, I think maybe in R4, we'll see if its listed as subject to MACT. When we looked up these facfilities, I think BCP sterilized food products – like spices and dog food.

From: Donaldson, Guy
Sent: Tuesday, August 14, 2018 4:27 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Is BCP a sterilizer? If so, shouldn't it be subject to the sterilizer MACT?

From: Larson, Darrin
Sent: Tuesday, August 14, 2018 3:04 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Cc: Gilrein, Stephen <gilrein.stephen@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Here's the LA only list and the R6 list, both based on the ADD call yesterday and the correction OAQPS made to include Sasol.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Tuesday, August 14, 2018 2:48 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: LDEQNATA Q&A.docx

My first shot at Q&A's

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/15/2018 3:52:10 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: Shell Technology Center Houston 2014 Air Emissions Inventory Ethylene Oxide

No, don't send separately to OAQPS. Fran asked that we do 1 send, so that's why the spreadsheet. Please update the spreadsheet, and I'll send it to OAQPS and cc everyone, and ask if they have questions about a specific entry. I think this is a cya exercise, as we are finding out – OAQPS has already verified numbers with many of the facilities we are talking to.

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 10:50 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: Shell Technology Center Houston 2014 Air Emissions Inventory Ethylene Oxide

I am sending these to you all, but am I supposed to be sending them to someone else in OAQPS? That seems like a very basic question that I never asked.

From: Charrance.Ball@shell.com [mailto:Charrance.Ball@shell.com]
Sent: Wednesday, August 15, 2018 10:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Shell Technology Center Houston 2014 Air Emissions Inventory Ethylene Oxide

Ahuja –

Sorry for the delay, but I wanted to make sure I was giving you the correct information. I was able to locate our 2014 AEI submittal and was able to confirm our Ethylene Oxide emissions are .5 tons per year.

		TPY	PPD	
58440	ETHYLENE OXIDE	0.4594	2.5144	0.0000

Please let me know if there is any more information that you may need. Also you mentioned there is a potential rule or regulatory change that may be coming in the future? If possible I would like to research this to see how it may affect my facility.

Best Regards,

Chuck Ball
Environmental Specialist (Air Program)
Gasmer & Shell Technology Center Houston (STCH)
Shell Oil Company - PTS
(281) 544-6688
3333 Highway 6 South
Houston, TX 77082
Email:charrance.ball@shell.com

KNOW LOPC

Follow the drill, but know your spills

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 5/9/2018 4:36:34 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: EtO updates - can you get back to me today?
Attachments: Ethylene Oxide NATA V2.xlsx

Hi Anupa,

Can you add notes to this spreadsheet to capture the status of the facilities you reached out to? New numbers and anything else worth noting. I know BCP said no change, and that AkzoNobel gave you lower numbers, so please add this and any other info. to the last column of the spreadsheet.

April Baiamonte from LDEQ is here at the workshop, so if you can update the spreadsheet today, that would be helpful.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/15/2018 12:34:04 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: Facilities informatiIon -
Attachments: NBG spreadsheet.xlsx

Very basic spreadsheet, but thought it would be easier to track all the info. Anupa, if there are facilities you have not contacted, I can make a call later this morning. I have to do my peopleplus this morning, and that always is a major ordeal. I have to sign out around 1:00, but I'll be back on the clock tomorrow.
HQ had wanted this done by today. I talked with Guy yesterday and told him the ball was rolling, but we most likely would not be finished by today, because we are not hearing back from the facilities. Guy said just do your best and get it done when you can.
BTW, I also checked with my state monitoring folks to see if they had better contacts. The only response I got back was a Shell Tech Center contact and I will call that person this morning.

Let me know if questions

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/15/2018 6:17:35 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Fwd: LDEQNATA Q&A.docx
Attachments: Ethylene Oxide NATA V2 w 061418 list corrected with Sasol _LA only.xlsx; ATT00001.htm; Ethylene Oxide NATA V2 w 061418 list corrected with Sasol.xlsx; ATT00002.htm

Sent from my iPhone

Begin forwarded message:

From: "Larson, Darrin" <Larson.Darrin@epa.gov>
Date: August 14, 2018 at 3:04:01 PM CDT
To: "Donaldson, Guy" <Donaldson.Guy@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>, "Parker, Cindy" <parker.cindy@epa.gov>, "Madden, Joshua" <madden.joshua@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>, Steve Thompson <thompson.steve@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Here's the LA only list and the R6 list, both based on the ADD call yesterday and the correction OAQPS made to include Sasol.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Tuesday, August 14, 2018 2:48 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: LDEQNATA Q&A.docx

My first shot at Q&A's

Message

From: Madden, Joshua [madden.joshua@epa.gov]
Sent: 8/15/2018 3:00:33 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Facilities informatiIon -

Yeah we all need a few humorous ones every once in a while to help us get through the day.

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 9:59 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Facilities informatiIon -

HA! I have so many emails to go through I am just getting to some of them. I always appreciate the humorous ones.

From: Madden, Joshua
Sent: Wednesday, August 15, 2018 8:44 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Facilities informatiIon -

Oh I see! Yeah that would be a lot of metal crying! I think me and Cindy do a lot of mental crying in dealing with NATA. That would be a Cindy question if anyone has called Port Neches. She was the one making all those calls this week. Cindy did you call?

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 8:41 AM
To: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Facilities informatiIon -

Thanks Josh! I was actually moving my last baby bird to college, so more mental crying than anything else☺

Have either one of you called Huntsman Port Neches? If not, I will call now, just wanted to make sure that no one (that we know of) has contacted them yet.

From: Madden, Joshua
Sent: Wednesday, August 15, 2018 8:38 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Facilities informatiIon -

I knew this would happen. We are tapping these facilities more than once and I'm sure they are scratching their collective heads asking what is going on with the EPA? Thank you for all the calls you are doing Anupa. Hope your feeling better!

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 8:28 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Facilities informatiIon -

Spoke with Annette Habetz from Sasol. She said she spoke with Jennifer someone from OAQPA last year and updated the info. The correct number is 6.33 tons, the same info she gave to OAQPS.

From: Parker, Cindy
Sent: Wednesday, August 15, 2018 7:40 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Facilities informatiIon -

Yea! I thought about putting it on sharepoint, but I have had sharepoint screw up excel spreadsheets, and don't want that to happen. We'll just have to share and update as best we can.

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 7:36 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Facilities informatiIon -

I have several voice mails so I may have things to add here.

From: Parker, Cindy
Sent: Wednesday, August 15, 2018 7:34 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: Facilities informatiIon -

Very basic spreadsheet, but thought it would be easier to track all the info. Anupa, if there are facilities you have not contacted, I can make a call later this morning. I have to do my peopleplus this morning, and that always is a major ordeal. I have to sign out around 1:00, but I'll be back on the clock tomorrow.
HQ had wanted this done by today. I talked with Guy yesterday and told him the ball was rolling, but we most likely would not be finished by today, because we are not hearing back from the facilities. Guy said just do your best and get it done when you can.
BTW, I also checked with my state monitoring folks to see if they had better contacts. The only response I got back was a Shell Tech Center contact and I will call that person this morning.

Let me know if questions

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Madden, Joshua [madden.joshua@epa.gov]
Sent: 8/15/2018 6:43:56 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: FW: Verifying 2014 emission numbers for NATA facilities, quick response needed.

This is the email that Cindy sent out yesterday to Danielle. She is who we worked with last year when we started on NATA. To myn knowledge Cindy has not heard back from her either yesterday or today.

From: Parker, Cindy
Sent: Tuesday, August 14, 2018 9:43 AM
To: Danielle Nesvacil <danielle.nesvacil@tceq.texas.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: Verifying 2014 emission numbers for NATA facilities, quick response needed.

Hi, Danielle,
Here's where we are -

We are finalizing our NATA assessment and need to verify 2014 ethylene oxide emission numbers for these Texas facilities.

Shell Technology Center (that I asked you about earlier), Houston, 2014 ethylene oxide emissions of 0.5 tons

Eastman Chemical, Texas Operations in Longview, 2014 ethylene oxide emissions of 7.4 tons

Midwest Sterilization Corp, Laredo, 2014 ethylene oxide emissions of 7.9

Huntsman, Port Neches, 2014 ethylene oxide emissions of 10.8

Can you please confirm these numbers with these facilities? We need responses by COB today. If you are not able to do, can you please forward your contact information for these two facilities so that we can call? I have the Shell Tech Ctr contact already.

Thank you for your assistance,

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Donaldson, Guy [Donaldson.Guy@epa.gov]
Sent: 8/15/2018 8:06:18 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: 2014 NATA emission numbers for Taminco, Sasol

I have a call into Jason Walker at Air Products.

From: Kelly Petersen [mailto:Kelly.Petersen@LA.GOV]
Sent: Wednesday, August 15, 2018 1:48 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; vivian.aucoin@la.gov
Subject: RE: 2014 NATA emission numbers for Taminco, Sasol

There have been no revisions to the 2014 EI data for the following facilities that were not included in the EIS upload of data in 2015. I have included the name and email address of the contact that submitted the inventory as well as the facility contact, where it is different.

Union Carbide – 2083
Submitted by: Bret DeJean dejeanbm@dow.com
EI Contact: Randy Riddick rriddick@dow.com (985) 783-4978

Air Products – 13560
Jason Walker jason.walker@evonik.com (985) 536-9133

Taminco, USA – 3263
Submitted by: Ivan Williams ivanwilliams@eastman.com
EI Contact: Chris M Markerson (225) 642-4226

Sasol Chemicals – 3271
Scott Shaw scott.shaw@us.sasol.com (337) 494-5058

Kelly Petersen
Air Planning and Assessment Division
Louisiana Department of Environmental Quality
Phone: (225) 219-3397 Fax: (225) 325-8141 kelly.petersen@la.gov

From: Parker, Cindy <parker.cindy@epa.gov>
Sent: Tuesday, August 14, 2018 9:45 AM
To: Kelly Petersen <Kelly.Petersen@LA.GOV>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: 2014 NATA emission numbers for Taminco, Sasol

Sorry – left one off the list –
We also need to confirm for Air Products, in Reserve, 2014 ethylene oxide emissions of 1.6 tons.

Sorry for the omission,
Thanks,
Cindy

From: Parker, Cindy
Sent: Tuesday, August 14, 2018 9:35 AM
To: Kelly.Petersen@LA.gov
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: 2014 NATA emission numbers for Taminco, Sasol

Hi, Kelly,

We are finalizing our NATA assessment and need to verify 2014 ethylene oxide emission numbers for two Louisiana facilities.

Taminco, USA, Inc, St Gabriel, Iberville Parish, emissions of 1.1 tons

Sasol Chemicals, LLC, Westlake, Calcasieu Parish, emissions of 6.3 tons.

Can you please confirm these numbers with both of these facilities? We need responses by COB today. If you are not able to do this, can you please forward your contact information for these two facilities so that we can call?

Thank you,

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Donaldson, Guy [Donaldson.Guy@epa.gov]
Sent: 8/15/2018 8:54:32 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: call log for EO facilities
Attachments: call log for EO facilities in R6.xlsx

OK so I heard back from Evonics (formerly Air Products) and added it to the table.

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 2:48 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: call log for EO facilities

Here is what I have so far.

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/15/2018 2:34:43 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: FW: LDEQNATA Q&A.docx
Attachments: 2014 NATA Results Dr Brown 081418 (005).pptx

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Wednesday, August 15, 2018 8:42 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Cc: Gilrein, Stephen <gilrein.stephen@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Revised power point correcting Louisiana slide and taking out the next steps slide

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From: Larson, Darrin
Sent: Tuesday, August 14, 2018 3:04 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Cc: Gilrein, Stephen <gilrein.stephen@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: RE: LDEQNATA Q&A.docx

Here's the LA only list and the R6 list, both based on the ADD call yesterday and the correction OAQPS made to include Sasol.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Tuesday, August 14, 2018 2:48 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: LDEQNATA Q&A.docx

My first shot at Q&A's

National Air Toxics Assessment (NATA): 2014 Results Summary

Briefing for LDEQ

August 14, 2018

What is NATA?

- Screening-level characterization of air toxics across the nation
  - Nationwide assessment with census **tract** resolution (about 74,000 tracts)
  - Based on air quality modeling of emissions from: stationary, mobile, biogenic sources, and fires using the National Emissions Inventory
  - Ambient and exposure concentration estimates for 175 HAP plus diesel particulate matter (DPM)
  - Cancer and noncancer risk estimates for about 140 Clean Air Act hazardous air pollutants (HAP) with health data based on chronic exposures
- This is the 6th NATA (2014 NATA)
  - Previous assessments for inventory years 1996, 1999, 2002, 2005, 2011
- Primary NATA Uses
  - Planning tool for EPA, state/local/tribal organizations
    - To identify locations of interest for further study
    - To prioritize pollutants and emission sources/types
    - To inform monitoring programs
  - Serve partner needs by developing innovative data and communication tools

Limitations

- Emissions, modeled ambient concentrations, and estimated inhalation exposures are only from sources of outdoor origin via the inhalation route of exposure
- Results are more uncertain at finer geographic scales
  - Surrogates used to allocate mobile and nonpoint source emissions
- Results should not be used to compare risks among different areas of the country
  - Underlying emissions data vary in level of detail from state to state
- Results should not be compared among NATAs
  - Changes in results are due to actual emission changes as well as the use of different modeling and emissions processing techniques. In addition, other assessment inputs, such as meteorological data and health benchmark values, change over time.

Ethylene Oxide Risks

- EtO emissions from point sources contribute at least 50% of cancer risks ≥ 100-in-1 million in 98 (of 106) census tracts in 18 (of 19) MSAs
- 93% of tracts with elevated risks are in four regions: 52% in Region 6, 25% in Region 3, 11% in Region 5, and 5% in Region 4
- Data review activities:
  - OAQPS contacted trade associations and facilities
  - Regional staff also contacted states and facilities
  - Any revised data received to date has been incorporated into NATA or evaluated for appropriateness for inclusion

Region 6 MSAs with Elevated Cancer Risks

2014 NATA Version 2

MSA Name	# Tracts
New Orleans-Metaire, LA	19
Beaumont-Port Arthur, TX	8
Laredo, TX	3
Marshall, TX	2
Lake Charles, LA	2
Baton Rouge, LA	9
Las Cruces, NM	1
Houston-The Woodlands-Sugar Land, TX	11

Blue dots are tracts with risk ≥ 100 in a million
Areas outlined in black are MSAs with elevated risk tracts

Facilities in LA w/ Elevated Risks

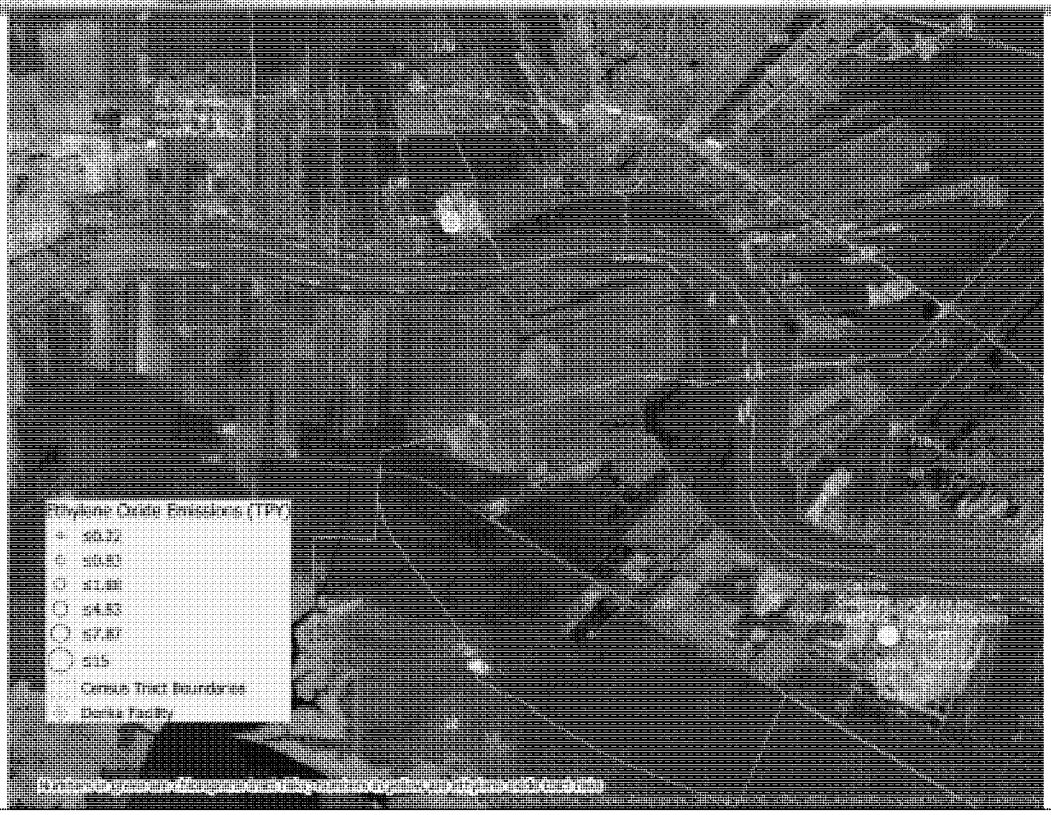
2014 NATA Version 2

MSA Area Name	Facility	Type of Facility	Potential Applicable MACT to Risk Driving Emissions	Review
New Orleans-Metairie, LA	Denka	Chemical plant	NA	n/a
	BCP Ingredients-New Hampton	Chemical plant	NA- Area	Facility. No changes.
	Union Carbide-St. Charles	Chemical plant	HON, Polyols	Facility. TBD.
	Air Products Reserve (Evonik)	Chemical plant	NA- Area	LDEQ-no changes
Lake Charles, LA	Sasol Chemicals	Chemical plant	HON	Corporate- No changes.
Baton Rouge, LA	Taminco	Chemical plant	NA - Area	LA DEQ. No changes.

6

Census Tracts Near LaPlace, LA w/ Elevated Cancer Risks from EtO and Chloroprene

2014 NATA Version 2



National Cancer Risk Results

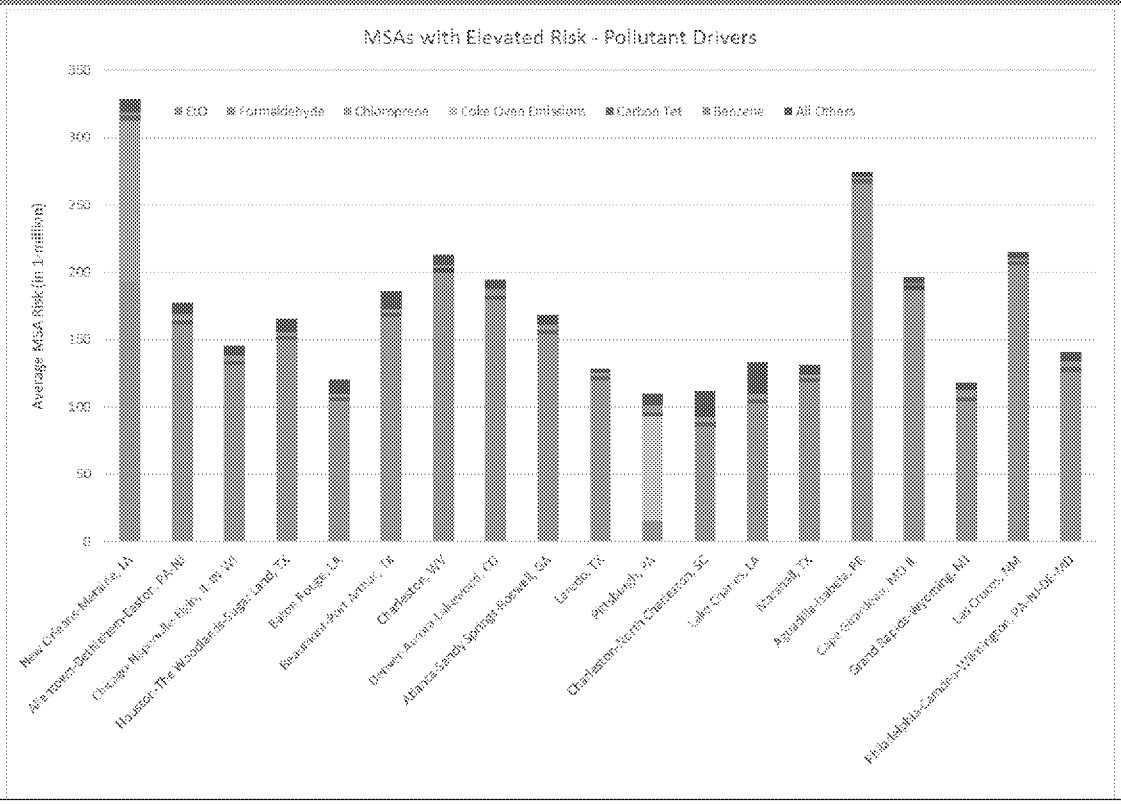
- Population-weighted, national-average cancer risk estimated to be **30-in-1 million**
- 106 tracts and 470,000 people estimated to have a cancer risk ≥ 100-in-1 million
- 19 MSAs estimated to have at least 1 census tract ≥ 100-in-1 million
- Tracts ≥ 100 in-1 million primarily driven by point source emissions
  - 57 of 106 tracts have risks ≥ 100-in-1 million from ethylene oxide ***alone***
- Other tract-level pollutant drivers include chloroprene, coke oven emissions, formaldehyde, chromium (VI) compounds
- Secondary formation (formaldehyde and acetaldehyde) estimated to contribute about 65 percent of the cancer risk nationwide

2011 NATA Results

- National-average cancer risk: 40-in-1 million
- 120 tracts, 500,000 people estimated to have cancer risk ≥ 100-in-1 million
- 12 MSAs with tracts ≥ 100-in-1 million

MSAs with Elevated Cancer Risks – Pollutant Drivers

2014 NATA Version 2

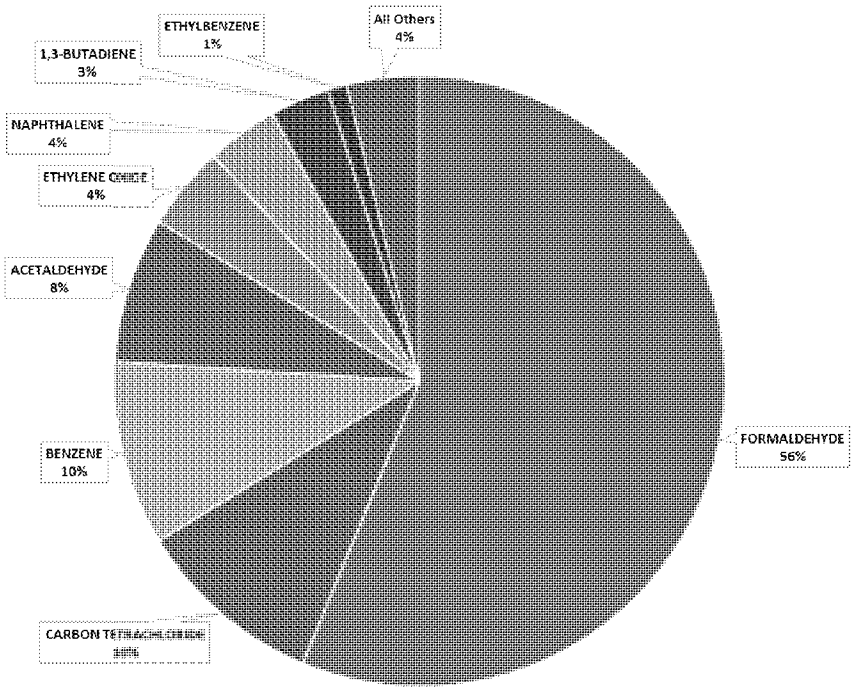


National Average Cancer Risk

2014 NATA Version 2

Pollutant Contributions (30-in-1 million)

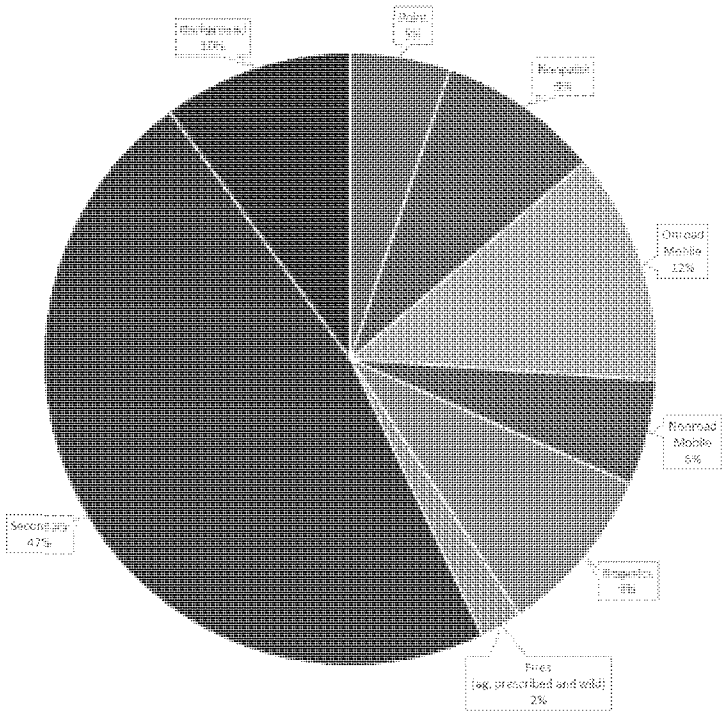
Ethylene oxide (stationary source pollutant) is a new risk driver in 2014



National Average Cancer Risk

2014 NATA Version 2

Source Contributions (30-in-1 million)



11

Message

From: Donaldson, Guy [Donaldson.Guy@epa.gov]
Sent: 8/15/2018 9:25:23 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
CC: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: Emissions confirmation
Attachments: call log for EO facilities in R6.xlsx

So I think all we don't have confirmation on is:

Union Carbide, St Charles and Midwest Sterilization Laredo.

Is that right?

Message

From: Donaldson, Guy [Donaldson.Guy@epa.gov]
Sent: 8/16/2018 12:21:01 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
CC: Larson, Darrin [Larson.Darrin@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]
Subject: RE: Huntsman Port Neches EO correction?

Yes it is. Can you guys check and see if TCEQ followed up with any enforcement?

Btw: I spoke with Ramiro Garcia and Steve Hagle separately yesterday and sent them the list of Texas facilities and told them we were targeting the week of the 27th.

From: Ahuja, Anupa
Sent: Thursday, August 16, 2018 6:45 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: Huntsman Port Neches EO correction?

Thanks. That is a lot of upset emissions.

From: Donaldson, Guy
Sent: Wednesday, August 15, 2018 4:24 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Huntsman Port Neches EO correction?

Kevin Cauble and Dannielle Nesvacil called me back. They explained that TRI includes all emissions including emission events, whereas what they report to NEI is routine emissions. Huntsman had several significant events in 2014 and when those are figured in the EI and TRI match exactly.

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 2:21 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: Huntsman Port Neches EO correction?

From: Strum, Madeleine
Sent: Wednesday, August 15, 2018 1:57 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Huntsman Port Neches EO correction?

In addition to Danielle Nesvacil who has reviewed emissions for NATA, I've recently worked with Jill Dickey (on a Combined Air Emissions Reporting Project) and she has indicated that TCEQ does compare with TRI as part of their QA – while emissions may be different due to unpermitted sources or TRI rounding, I am not sure that large differences like that would be explained by these factors.

Hope those contacts can help.

Madeleine

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 2:19 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Huntsman Port Neches EO correction?

Sorry, I misspoke, my number of 21 tons is from ECHO and pulls from the TRI database. I don't understand why the numbers are so different. I will see if we can check with the state.

From: Smith, Darcie
Sent: Wednesday, August 15, 2018 12:59 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Huntsman Port Neches EO correction?

That is the number reported in the 2014 NEI (both version 1 and 2). I assume that it was state-reported (Madeleine – it says SLT in the "Data source" field).

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, August 15, 2018 1:54 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: Huntsman Port Neches EO correction?

Hi Darcie and Jennifer,

I had sent you email previously letting you know that the Huntsman Port Neches facility expanded capacity after 2014 and in 2016 their emissions were 38.6 tons but I did not check the 10.8 number you list as 2014 emissions against the TRI database.

When I check the TRI database, that says the EO emissions for 2014 are **21.2 tons.** Cindy Parker in R6 spoke to someone at the facility today and he stated that the 2014 EO emission are **21 tons**.

Where did the 10.8 tons come from?

Thanks,
Anupa

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/16/2018 3:18:10 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]
CC: Donaldson, Guy [Donaldson.Guy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: R6 Facilities checklist
Attachments: Copy of call log for EO facilities in R6 (003).xlsx

Here is what we have. As you know, Union Carbide is still being worked. Let me know if you have any questions.

Thanks,

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/16/2018 6:05:55 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Thank you

Rick Hare from the Conroe facility just called; he said their emissions were only 2.6, so I will let Darcie know, but he also said they were an end user, they did not make EtO.

From: Ahuja, Anupa
Sent: Thursday, August 16, 2018 12:13 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Thank you

Thanks. The Conroe one fell off the latest list that Darrin had. So I didn't call them.

From: Parker, Cindy
Sent: Thursday, August 16, 2018 12:03 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: Thank you

Just so you know. One was in Conroe, the other in Port Neches, both were Huntsman.

From: Madden, Joshua
Sent: Thursday, August 16, 2018 11:23 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Thank you

Both Conroe Facility and Port Neches are Huntsman Corp. facilities. I verified their addresses and Lat. And Longs.

From: Parker, Cindy
Sent: Thursday, August 16, 2018 11:15 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: Thank you

Thanks for your help in verifying emission numbers. Seems like many of the facilities had already verified with Jennifer, and I'm not even sure we had the same list that HQ did. But we got this brush fire put out, and now we can move forward. Thank you for your help.

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 6/14/2018 5:46:08 PM
To: Parker, Cindy [parker.cindy@epa.gov]
CC: Ahuja, Anupa [ahuja.anupa@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: today's meeting with Wren, Cheryl -
Attachments: Ethylene Oxide NATA V2 w 061418 names.xlsx

Here's a V2 spreadsheet with the ones that NOT on the slides grayed out.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Thursday, June 14, 2018 12:37 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: today's meeting with Wren, Cheryl -

No, all we got was the slides, too.

From: Larson, Darrin
Sent: Thursday, June 14, 2018 11:58 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: today's meeting with Wren, Cheryl -

I've got non-stop meetings/conf. calls until 1 pm, but I just took a look at the slides.

I didn't get a spreadsheet from Erika—just the slides. Did you? If not, can you reach out to Darcie and ask her if she has a spreadsheet w/ updated numbers? The slides have names but not numbers.

I think we can tell Cheryl and Wren that we just got the slides and are seeing if we can get a spreadsheet with numbers, and are planning to share updated lists with the states (w/out risk). It would be good to share emission amounts, which aren't in the slides.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Thursday, June 14, 2018 10:56 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>

Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: today's meeting with Wren, Cheryl -

Are y'all preparing a list of the companies names to go with the spreadsheet Erica sent?
Are you doing anything with the spreadsheet you (Darrin) gave everyone on Monday to compare that list to the final list in Erica's slideshow?
Just in case there are questions from either Wren or Cheryl.

Also, did you note that Erica's message/slide show went to David, Anne, and Emily as well??

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 6/22/2018 2:49:53 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: EtO emission numbers

No worries, thanks!

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:47 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: EtO emission numbers

Yes – I meant to include Josh. I'm currently in a class and trying to juggle too many things.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Friday, June 22, 2018 9:30 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: EtO emission numbers

Thank you.
Darrin, when you forward info to Fran and/or myself, could you also include Joshua Madden?
Thanks,
Cindy

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM

To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

Robin Langdon of OAQPS called me after our conf. call yesterday, to discuss when OAQPS could provide us with the latest emission data for the 9 facilities on the slides OAQPS shared with us during the June 14 briefing. She said they need to brief Wehrum prior to sharing the latest information (risk numbers, etc.), but agreed to provide us the emission numbers on Monday. We can share the emissions data with the states, but she asked that EPA and the states hold off on reaching out to the facilities using this newest data until after the Wehrum briefing, which is set for next Wednesday.

Here is the current list of 9 EtO facilities:

Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana
Port Neches Plant (Huntsman Corp.)	Texas
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana
Shell Technology Center Houston	Texas
BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 6/28/2018 7:52:47 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: FW: Can you send the current list of ethylene oxide facilities? Tks
Attachments: Ethylene Oxide NATA V2 w 061418 list LA.xlsx

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Thursday, June 21, 2018 2:37 PM
To: Thompson, Steve <thompson.steve@epa.gov>; Lourdes Iturralde <Lourdes.Iturralde@LA.GOV>
Subject: RE: Can you send the current list of ethylene oxide facilities? Tks

Here's the latest list of EtO facilities expected to be on the NATA list. OAQPS hasn't provided us the latest emission numbers (just the facility names), but I included the most recent emission numbers we have for reference.

Please let me know if you have any questions.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Thompson, Steve
Sent: Thursday, June 21, 2018 1:48 PM
To: Lourdes Iturralde <Lourdes.Iturralde@LA.GOV>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: Re: Can you send the current list of ethylene oxide facilities? Tks

Darrin,
Can you please send Lourdes the updated list of LA facilities?

Thanks,
Steve

Sent from my iPhone

On Jun 21, 2018, at 12:44 PM, Lourdes Iturralde <Lourdes.Iturralde@LA.GOV> wrote:

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 5/17/2018 3:54:47 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Thanks - RE: revised EtO spreadsheet for LDEQ

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, May 17, 2018 10:33 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: revised EtO spreadsheet for LDEQ

Ok here it is.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 10:32 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

Eventually yes, but blocks inform tracts and OAQPS hasn't finalized the tracts yet.

If you can remove that text and re-send to me to share w/ LDEQ, that would be great.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, May 17, 2018 9:04 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

I thought the point was the difference in tract vs block.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 8:52 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

I think we should leave off that notation. The V2 list doesn't include Tract level V2 risk numbers, only Tract level V1 risk numbers, because OAQPS won't recalculate Tract level risk numbers until they get back changes during this round. The

agency doesn't actually know which facilities will be at 100 in million or higher yet. Also, the V1 Tract level risk numbers in the V2 spreadsheet currently show Shell Geismar, BASF Geismar, Sasol, and Dow with numbers below 100.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, May 17, 2018 8:35 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: EtO spreadsheet for LDEQ

I have included BASF along with a note explaining that the difference between it and the other facilities so that LDEQ is clear on the ones that may be presented publically.

From: Larson, Darrin
Sent: Thursday, May 17, 2018 7:55 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: EtO spreadsheet for LDEQ

For now, we should include all the facilities on V2.

Sent from my iPhone

On May 17, 2018, at 7:24 AM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:

> Before I add it, should we discuss that we now want to go down to the block level on risk? Would that add any additional facilities besides BASF in LA?
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Wednesday, May 16, 2018 2:29 PM
> **To:** Ahuja, Anupa <ahuja.anupa@epa.gov>
> **Subject:** FW: EtO spreadsheet for LDEQ
>
> You can use this to come up with a revised spreadsheet that include both Geismar facilities.
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Yurk, Jeffrey
> **Sent:** Wednesday, May 16, 2018 12:30 PM
> **To:** Larson, Darrin <Larson.Darrin@epa.gov>
> **Subject:** RE: EtO spreadsheet for LDEQ

Here's 2014

Attached is the 2014 ethylene Oxide Inventory for Louisiana. The AI# is in column B and the permit number is in column R.

From: Larson, Darrin
Sent: Tuesday, May 15, 2018 3:04 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: FW: EtO spreadsheet for LDEQ

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Tuesday, May 15, 2018 2:12 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: EtO spreadsheet for LDEQ

When I went back through my files, I remembered that I had already created a spreadsheet for myself that was an amalgam of several spreadsheet and contains the emission point IDs as well as the permit numbers. When I check it against the V2 spreadsheet you said had the 8 facilities, I noticed that my version (which is based on several of Jeff Yurk's spreadsheets) lists Shell Chemical in Geismar while the V2 version lists BASF in Geismar. Maybe the V2 has been updated with current owner/operator. I called Darcie to ask which the correct owner operator and left her a message. But the permit numbers should be still be right as the facility would only apply for a name change to the state. But I wanted to point that out.

Appointment

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 6/14/2018 4:44:03 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]

Subject: FW: NATA Results Briefing for Region 6 - Room C501A - Phone 1(202) 991-0477 Conference I.D. 1200676 *ATTACHMENT*
Attachments: 2014 NATA Results Briefing for R6 staff.pptx
Location: RTP-OAQPS-C501A/RTP-OAQPS-BLDG-C

Start: 6/14/2018 7:00:00 PM
End: 6/14/2018 8:00:00 PM
Show Time As: Tentative

-----Original Appointment-----
From: Sasser, Erika
Sent: Tuesday, June 05, 2018 11:56 AM
To: Sasser, Erika; Smith, Darcie; Palma, Ted; Strum, Madeleine; Bremer, Kristen; Seager, Cheryl; Stenger, Wren; Gray, David; Vandenberg, John; Koerber, Mike; Jones, Rhea
Cc: Langdon, Robin; Wayland, Richard; Houyoux, Marc; Verhalen, Frances; McGee, Tomika; Donaldson, Guy; Price, Lisa; Parker, Cindy; Madden, Joshua; Larson, Darrin; Ahuja, Anupa; Taheri, Diane; Welton, Patricia; Chiang, I-Jung; Noonan, Jenny
Subject: NATA Results Briefing for Region 6 - Room C501A - Phone 1(202) 991-0477 Conference I.D. 1200676 *ATTACHMENT*
When: Thursday, June 14, 2018 3:00 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: RTP-OAQPS-C501A/RTP-OAQPS-BLDG-C

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Help

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/12/2018 11:17:19 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Ethylene oxide facility in NM - NATA

That would seem likely—Sterigenics was at 135 in a million risk in V2, so they're on the lower end of the 100 in a million risk.

Anupa is waiting to hear back from Mort.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Thompson, Steve
Sent: Thursday, July 12, 2018 2:28 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: Ethylene oxide facility in NM - NATA

I just wanted to see if the 2016 TRI reflects a reduction in ETO emissions. We likely wouldn't need to re run the model. The model should behave linearly so an 83% reduction in emissions would approximate an equal reduction in risk.

Sent from my iPhone

On Jul 12, 2018, at 1:04 PM, Larson, Darrin <Larson.Darrin@epa.gov> wrote:

> I spoke with Anupa, and wanted to clarify what you're trying to find out. It sounds like you want to know if the 2016 emissions numbers will put Sterigenics below the 100 in million risk. Is this correct? To figure this out, in addition to looking at the 2016 reported emissions, we'll also need to have OAQPS run the 2016 number through the NATA calculations. I asked them to do this during the briefing in June. It won't change the NATA but will change the communication re: the results.
>
> We can also look at the EI, or has the state already done that?
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> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Ahuja, Anupa
> **Sent:** Thursday, July 12, 2018 12:38 PM

To: Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: Ethylene oxide facility in NM - NATA

The NSR permit issued in 2014 says there was a 20% increase in capacity but they also captured previously uncontrolled emissions. The emissions controls they put in then on the sterilization chamber were upgraded also. The control efficiencies are 99% for the newly controlled and upgraded controls. But I do not have actuals (only the permitted limits).

From: Thompson, Steve
Sent: Thursday, July 12, 2018 12:34 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: Ethylene oxide facility in NM - NATA

So this statement appears to indicate that the current emissions are reduced from 3 tons to less than 1? Can you look up the Current TRI reported value?

Per Region V who contacted Sterigenics, emission reduction techniques were put into place by Sterigenics at this facility. TRI emissions reflect this- emissions went down by 83% between 2016 and 2014. TRI ID is 88008GRFFT2400A

Sent from my iPhone

On Jul 12, 2018, at 11:13 AM, Larson, Darrin <Larson.Darrin@epa.gov> wrote:

> Here's what I sent to NMED.
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Thursday, May 24, 2018 1:54 PM
> **To:** 'Gruebel, Ralph, NMENV' <Ralph.Gruebel@state.nm.us>
> **Cc:** Steve Thompson <thompson.steve@epa.gov>
> **Subject:** Ethylene oxide facility in NM - NATA
>
> Hi Ralph,
>
> Here's the facility I mentioned during our call. Please let me know if you would like to discuss further.
>
> For more info. on NATA in general, here's the link: https://www.epa.gov/national-air-toxics-assessment
>
> And here's a link to the IRIS ethylene oxide page:
> https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025
>
> Darrin

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

<Ethylene Oxide NATA NM.xlsx>

Message

From: Ahuja, Anupa [ahuja.anupa@epa.gov]
Sent: 7/13/2018 6:02:28 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

I found the TRI website but it keeps crashing my system. Before it crashed (for like the 5th time), the EtO emissions in Dona Ana county (where sterigenics is located) was 967 lbs for 2016 (= 0.48 ton). I am guessing there are no other facilities located there but my computer crashes before I can see the report. They only have data available for 2016 and 2015, both after the new controls were installed. Maybe Mort has access to historical (2014) data. Obviously the 0.48 ton is way less than the 6 ton combined limit, but since I can't get to the 2014 data, I have nothing to compare to see how much emissions went down.

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 12:13 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Sure, I will look.

From: Larson, Darrin
Sent: Friday, July 13, 2018 12:11 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

I guess not.

Can you see if there is any info. publicly available?

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 11:59 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

Got this in the am. I don't think I will get it today.

From: Wakeland, Morton
Sent: Friday, July 13, 2018 8:06 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

am just back in Friday – out all week, may have to leave in a few…will try to get to

Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Yurk, Jeffrey
Sent: Thursday, July 12, 2018 12:48 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Mort: Can you help Anupa out with ethylene oxide air emissions from TRI requested below for Sterginics in New Mexico?

Thanks,

Jeff

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 12:44 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: 2014/2016 EtO emissions from Sterginics in NM?

Hi Jeff,
Steve Thompson is asking if the EtO emissions in TRI have been reduced by 83% in 2016 vs 2014. If you send the emissions for those 2 yrs, I can do the calc.

Thank you,
Anupa

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/13/2018 4:42:24 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Ethylene oxide facility in NM - NATA

Any word from Mort?

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Thompson, Steve
Sent: Thursday, July 12, 2018 2:28 PM
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> Office: 214-665-7115
> Mobile: 972-467-5509
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> **To:** Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
> **Subject:** RE: Ethylene oxide facility in NM - NATA
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were upgraded also. The control efficiencies are 99% for the newly controlled and upgraded controls. But I do not have actuals (only the permitted limits).

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> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Thursday, May 24, 2018 1:54 PM
> **To:** 'Gruebel, Ralph, NMENV' <Ralph.Gruebel@state.nm.us>
> **Cc:** Steve Thompson <thompson.steve@epa.gov>
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>
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>
> Darrin
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6

Office: 214-665-7115
Mobile: 972-467-5509

<Ethylene Oxide NATA NM.xlsx>

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/16/2018 5:14:06 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: EtO list of 9
Attachments: 2014 NATA Results Briefing for R6 staff.pptx; Ethylene Oxide NATA V2 w 061418 list.xlsx

The list of 9 came from slides 13 and 14 in OAQPS's 6/14/18 PowerPoint presentation to us.

I put those in a spreadsheet (using V2 emissions info).

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/24/2018 12:46:52 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: Emissions data

Thanks.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 6:36 AM
To: Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: Emissions data

FYI.

From: Caparoso, Jennifer
Sent: Tuesday, July 24, 2018 6:25 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Emissions data

Hi Anupa,

While not reflected in NATA, we received additional information from the Union Carbide St. Charles Facility that we are still evaluating and discussing with the facility. When we complete our analysis, if there are any changes, we will share them with you. We have not received any other emissions changes.

Jennifer Caparoso, P.E.
CDR, USPHS
Refining and Chemicals Group
SPPD/OAQPS
U.S. Environmental Protection Agency
Mail Code: E143-01
Research Triangle Park, NC 27711
(919) 541-4063

From: Ahuja, Anupa
Sent: Thursday, July 19, 2018 11:10 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Ok thanks Darcie.

From: Smith, Darcie
Sent: Thursday, July 19, 2018 10:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>

Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Hi Anupa –

Thanks for your question. You're right, we have spoken with our AA, but the conversation is not yet over…

Regarding the emissions, as I shared with you previously, there are no new emissions, with the exception of a minor one (20 lbs out of 7 tons) for Texas Operations in Longview TX and possibly some updated emissions from Union Carbide St. Charles. We've been expecting some, so I've copied Jennifer Caparoso on this because if we have received new emissions for that facility, she will have them.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, July 18, 2018 11:32 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Emissions data

Hi Darcie,
Now that the Wehrum briefing is done, my management is asking if it would be possible for us to get the updated emissions data for the 9 facilities in R6? We have the 2014 emissions inventory data, but we would like to get the updates to the emissions that may have been provided by the companies.

Thank you,
Anupa

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/24/2018 6:25:44 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]
CC: Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: Data question on ppt for today's call

To clarify, we understand that NATA is based on 2014 emissions. Ex. 5 Deliberative Process (DP)
Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Verhalen, Frances
Sent: Tuesday, July 24, 2018 10:03 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Data question on ppt for today's call

All: please remember that the NATA deals with the EI or TRI that was for 2014. This NATA report will relate only to the 2014 emissions or inventory for the projected risks.

The comparisons must remain in context. Additional information received after January 1, 2015, will be included in the calculations for the next round. This additional information is relevant in discussions about *corrective/compliance* actions.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 9:52 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Data question on ppt for today's call

On the R6 ppt slides for today's call, I noticed that for the Port Neches, tx plant the review column says "no changes" and under review it says "TCEQ – no changes". For the Santa Teresa NM plant, the review column says "emissions decreased."

I have reviewed the TRI data for both plants and:

1)

2)

Ex. 5 Deliberative Process (DP)

I am concerned that Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/25/2018 1:33:09 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Thanks-Re: increase in EtO emissions of 17 tons

Sent from my iPhone

On Jul 25, 2018, at 6:50 AM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:

FYI.

From: Smith, Darcie
Sent: Tuesday, July 24, 2018 5:41 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: increase in EtO emissions of 17 tons

Hi Anupa –

I'm copying Madeleine on this since she is involved in a lot of the emissions related review as well.

Ex. 5 Deliberative Process (DP)

Thanks for bringing these points up Anupa. I think you're a few steps ahead of NATA and into the further investigation step of the process, which is great! As we continue moving forward, I'm sure we'll have more questions for you about the situations you've mentioned.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
<image007.png> 919.541.2076
<image008.png>smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Tuesday, July 24, 2018 11:00 AM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: increase in EtO emissions of 17 tons

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I am concerned that Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Anupa

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Sent: Tuesday, July 24, 2018 6:25 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Emissions data

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Jennifer Caparoso, P.E.
CDR, USPHS
Refining and Chemicals Group
SPPD/OAQPS
U.S. Environmental Protection Agency
Mail Code: E143-01
Research Triangle Park, NC 27711
(919) 541-4063

From: Ahuja, Anupa
Sent: Thursday, July 19, 2018 11:10 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Ok thanks Darcie.

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Sent: Thursday, July 19, 2018 10:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

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Thank you,
Anupa

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 7/26/2018 7:25:03 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: increase in EtO emissions of 17 tons

Thank you.

From: Ahuja, Anupa
Sent: Thursday, July 26, 2018 12:39 PM
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919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, July 18, 2018 11:32 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Emissions data

Hi Darcie,
Now that the Wehrum briefing is done, my management is asking if it would be possible for us to get the updated emissions data for the 9 facilities in R6? We have the 2014 emissions inventory data, but we would like to get the updates to the emissions that may have been provided by the companies.

Thank you,
Anupa

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/26/2018 11:36:57 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: EtO - notes from today's Wehrum call w/ Regions

The main thing discussed by Wehrum today was that we need to take a hybrid approach. A regulatory approach and other steps measures. He said that the risk levels are high enough that we need to considers steps beyond 112. We need to id. facilities where we need to do more than the regulatory approach. He discussed the need to gather more information, for both the reg. approach and to look at ways to reduce emissions.

We should talk next week, and then loop in Guy and Fran so we can further develop a strategy to share with Cheryl and Wren (and then Anne and David)/

On the call, it was also mentioned that ATSDR has drafted a letter to R5 re: the risk near the Sterigenics facility (1 in 10,000 risk, I believe they said). And they're starting to work on the communications strategy.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/24/2018 12:56:03 PM
To: Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: Please sit in on this call today at 2 pm - EtO Call for ADDs
Attachments: 2014 NATA Results Summary_Special Purpose Call.pptx; 2014 NATA Results by Region.pptx

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Verhalen, Frances
Sent: Tuesday, July 24, 2018 7:25 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: EtO Call for ADDs

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Verhalen, Frances
Sent: Monday, July 23, 2018 4:06 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: EtO Call for ADDs

We will be meeting in the Little Rock Conference Room on the 7th floor for this call on Tuesday, July 24, at 2 pm.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

Message

From: Ahuja, Anupa [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DDCA3C3DF27E43E19290ADBC3FBEA309-AHUJA, ANUPA]
Sent: 7/17/2017 1:16:57 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: FW: NATA data briefing papers for 4/25 briefing.
Attachments: R6 NATA 2014 100 in a MILLION.xlsx; NATA update 042517a.doc

---

From: Ahuja, Anupa
Sent: Thursday, June 08, 2017 9:37 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: FW: NATA data briefing papers for 4/25 briefing.

Hi Jeff,
Darrin asked me to forward this list of facilities to you.

Thanks.

From: Larson, Darrin
Sent: Thursday, May 11, 2017 1:49 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: NATA data briefing papers for 4/25 briefing.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Osbourne, Margaret
Sent: Thursday, May 04, 2017 7:45 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: NATA data briefing papers for 4/25 briefing.

Margaret Osbourne
Chief, Air Toxics Enforcement Section
Compliance Assurance & Enforcement Division
EPA Region 6
1445 Ross Avenue (6EN-AT)
Dallas, TX 75202
214-665-6508

From: Parker, Cindy
Sent: Wednesday, April 26, 2017 1:30 PM
To: Chen, Justin <Chen.Justin@epa.gov>

Cc: Osbourne, Margaret <osbourne.margaret@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: NATA data briefing papers for 4/25 briefing.

Hi, Justin, Margaret,

Wanted to let you know we briefed Wren yesterday on the NATA data review and analysis. Josh pulled the attached worksheet together for this briefing. Given the region's experience with chloroprene two years ago, Wren's questions centered mostly around the facilities, and their current permits. I have contacts at each of our states who are also reviewing the data, and confirming the reported emissions numbers with the facilities. I am hoping you can help us with the facilities' permits information and compliance history? We have Air Programs staff that we are working with, as well. It will take a team to help prepare the region for the public release of NATA data next spring.

I don't know how much you know/remember/are aware of, so if you know this, I apologize for repeating.

The next deadline is May 1 for the states to submit any change sheets for facilities requiring changes to their emissions data. This deadline is for all pollutants, except ethylene oxide. The deadline for changes for ethylene oxide numbers is June 1. By mid-June (hopefully) we should have the set of numbers that is what will be released to the public. We are planning on getting back in touch with Wren after the June 1 deadline, and at that time, we expect Wren to formally meet with other regional offices (EN, for example), and then Senior Staff.

Justin, please let me know if you have questions; this is a short summary, and I know we said not to clutter up your email box until you knew how involved you'd be. If you can assist with gathering additional facilities information, that would be great.

Margaret, Fran – I don't know what happened with Denka, because I wasn't involved, but wondering, as we gather info and need to easily share between offices, should we have a sharepoint page? Wondering about tracking/filing the volume of information we'll be gathering and sharing. Ideas?

PS, you didn't miss anything with the map ap webinar on Monday. I think the map ap will be a neat feature, and I do know we will need a map, but the webinar was a bust. Sometimes technology works in your favor, sometimes not. And I forgot to bring popcorn.

Thank you,
Cindy

From: Parker, Cindy
Sent: Monday, April 24, 2017 3:56 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: NATA data briefing papers, for 11:00 am, Tues Apr 25 briefing

Wren, Lisa,

Attached are documents for tomorrow's 11:00 briefing on our National Air Toxics Assessment data review. The WE CARE sheet provides background information on NATA, process for reviewing the data, and our hotspots. The attached spreadsheet provides detail on emissions numbers, and the locations for our hotspots. We are looking forward to talking with you tomorrow.

Thank you,
Cindy Parker

Message

From: Stenger, Wren [stenger.wren@epa.gov]
Sent: 8/13/2018 6:12:25 PM
To: Gray, David [gray.david@epa.gov]; Seager, Cheryl [Seager.Cheryl@epa.gov]
CC: Thompson, Steve [thompson.steve@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]
Subject: FW: 2014 NATA Short Term actions and facilities list
Attachments: Facility checklist_Aug13 Final.edit.xlsx; ATT00001.htm

The revised short term action facilities list, minus the Reserve Plant.

From: Koerber, Mike
Sent: Monday, August 13, 2018 1:00 PM
To: Stenger, Wren <stenger.wren@epa.gov>
Cc: Perez, Idalia <Perez.Idalia@epa.gov>
Subject: Fwd: 2014 NATA Short Term actions and facilities list

Wren - Here is the revised list.

From: "Stenger, Wren" <stenger.wren@epa.gov>
Date: August 13, 2018 at 1:15:43 PM EDT
To: "Koerber, Mike" <Koerber.Mike@epa.gov>, "Sasser, Erika" <Sasser.Erika@epa.gov>, "Lassiter, Penny" <Lassiter.Penny@epa.gov>
Cc: "Stenger, Wren" <stenger.wren@epa.gov>
Subject: 2014 NATA Short Term actions and facilities list

Mike, all,

After hearing the criteria of 1000 in 1M risk for ethylene oxide for the targeted short term action, R6 requests that you remove Air Products Performance Manufacturing Inc—Reserve Plant, LA from the facilities' short-term action list. We can pull it in functionally after 2014 NATA is released, but prefer it is not included on the list. I discussed this with the R6 DRA, and he agrees.

WREN STENGER

DIRECTOR, MULTIMEDIA DIVISION

EPA REGION 6 DALLAS, TEXAS

214.665.6583

Message

From: Stenger, Wren [stenger.wren@epa.gov]
Sent: 8/13/2018 5:18:26 PM
To: Gray, David [gray.david@epa.gov]
CC: Donaldson, Guy [Donaldson.Guy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Seager, Cheryl [Seager.Cheryl@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]
Subject: FW: 2014 NATA Short Term actions and facilities list
Attachments: 2014 NATA Facility list for short-term action DRAFT Aug 13 2018.xlsx

My note to OAQPS and the draft short-term facility list.

From: Stenger, Wren
Sent: Monday, August 13, 2018 12:17 PM
To: Koerber, Mike <Koerber.Mike@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>
Cc: Stenger, Wren <stenger.wren@epa.gov>
Subject: 2014 NATA Short Term actions and facilities list

Mike, all,

After hearing the criteria of 1000 in 1M risk for ethylene oxide for the targeted short term action, R6 requests that you remove Air Products Performance Manufacturing Inc—Reserve Plant, LA from the facilities' short-term action list. We can pull it in functionally after 2014 NATA is released, but prefer it is not included on the list. I discussed this with the R6 DRA, and he agrees.

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

Message

From: Stenger, Wren [stenger.wren@epa.gov]
Sent: 8/8/2018 8:37:51 PM
To: Donaldson, Guy [Donaldson.Guy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
Subject: Fwd: CLOSE HOLD: next steps on EtO facilities
Attachments: ATSDR Sterigenics EtO Consult Letter-final.pdf; ATT00001.htm; EtO info 080618.docx; ATT00002.htm

Wren Stenger, Director
Multimedia Division

Begin forwarded message:

From: "Perez, Idalia" <Perez.Idalia@epa.gov>
Date: August 7, 2018 at 11:26:00 AM CDT
To: "Moraff, Kenneth" <Moraff.Ken@epa.gov>, "Hamjian, Lynne" <Hamjian.Lynne@epa.gov>, "Conroy, David" <Conroy.Dave@epa.gov>, "Filippelli, John" <Filippelli.John@epa.gov>, "Iglesias, Ariel" <Iglesias.Ariel@epa.gov>, "Fernandez, Cristina" <Fernandez.Cristina@epa.gov>, "Arnold, David" <arnold.david@epa.gov>, "Banister, Beverly" <Banister.Beverly@epa.gov>, "Kemker, Carol" <Kemker.Carol@epa.gov>, "Mitchell, Ken" <Mitchell.Ken@epa.gov>, "Nam, Ed" <nam.ed@epa.gov>, "Furey, Eileen" <furey.eileen@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>, "Smith, Mark A." <Smith.Marka@epa.gov>, "Smith, John" <Smith.John@epa.gov>, "Hestmark, Martin" <Hestmark.Martin@epa.gov>, "Daly, Carl" <Daly.Carl@epa.gov>, "Morales, Monica" <Morales.Monica@epa.gov>, "Wood, MelanieL" <Wood.MelanieL@epa.gov>, "Adams, Elizabeth" <Adams.Elizabeth@epa.gov>, "Lakin, Matt" <Lakin.Matthew@epa.gov>, "Hamlin, Tim" <Hamlin.Tim@epa.gov>, "Hastings, Janis" <Hastings.Janis@epa.gov>
Cc: "Koerber, Mike" <Koerber.Mike@epa.gov>
Subject: CLOSE HOLD: next steps on EtO facilities

ADDs,
Attached are two documents. Both are **close hold**, please do not share.

1. Draft list of facilities for discussion on Wednesday's special purpose call.

2. ATSDR letter mentioned by Region 5 on the last EtO call. Below some contextual information:

   In June, after conducting modeling and monitoring around an ethylene oxide source (Sterigenics) in the suburbs of Chicago, Region 5 requested that ATSDR review the results and specifically answer the question: If modeled and measured EtO concentrations represent long-term conditions, would they pose a public health problem for people living and working in Willowbrook?

   ATSDR's assessment of that question is provided in the attached letter consult. Please keep it close hold. Note their findings and recommendations are specific to the Sterigenics facility in Willowbrook, Illinois.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/13/2018 7:46:00 PM
To: Donaldson, Guy [Donaldson.Guy@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: FW: double check for LA

From: Madden, Joshua
Sent: Monday, August 13, 2018 1:59 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: FW: double check for LA

From: Smith, Darcie
Sent: Tuesday, July 31, 2018 9:25 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: double check for LA

Fyi – I made a new slide for you, just in case they get used again, although I don't think they will…

2014 NATA Version 2

Facilities in Region 6 (LA) w/ Elevated Risks

MSA Area Name (City, State)	Facility Name	Type of Facility	Potentially Applicable MACT Associated with EtO Emissions	Review
New Orleans-Metairie, LA (LaPlace, LA)*	Denka	Chemical plant	NA – P&R I	NA
New Orleans-Metairie, LA (New Hampton, LA)	BCP Ingredients	Chemical plant	NA – area	Facility - no changes
New Orleans-Metairie, LA (Hahnville, LA)	Union Carbide St. Charles	Chemical plant	HON	Facility – emissions changes for a flare
New Orleans-Metairie, LA (Reserve)	Air Products Reserve Plant (Evonik)	Chemical plant	NA – area	LA DEQ - no changes
Lake Charles, LA (Westlake)	Sasol Chemicals (USA) LLC – Lake Charles Chemical Complex	Chemical plant	HON	Corporate – no changes
Baton Rouge, LA (St. Gabriel, LA)	Taminco – St Gabriel Plant	Chemical plant	NA – area	LA DEQ - no changes

* For the LaPlace, LA area the primary risks are driven by emissions of chloroprene.

9

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Smith, Darcie
Sent: Monday, July 30, 2018 1:49 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: double check for LA

Fyi

Josh – you were right, see Ted's note below.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Palma, Ted
Sent: Monday, July 30, 2018 1:47 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: double check for LA

The facility that is driving the 2 census tracts in Lake Charles LA is 8468011 Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex Louisiana Westlake 2201 Old Spanish Trail

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Smith, Darcie
Sent: Friday, July 27, 2018 2:54 PM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: double check for LA

Hi Ted –

I have two questions for you.

First, can you please double check for me the name of the facility in the Lake Charles, LA MSA area that is driving the EtO risk?

Secondly, there is a facility – 5287111 – in Reserve, LA (which is in St. Charles Parish), the Air Products Performance Manufacturing Inc Reserve Plant. Can you please let me know what its tract risk is?

It is possible that I mixed up the two and it is possible that we left one off the list. I'm trying to help Fran figure out which is right.

Thanks!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/16/2018 4:04:11 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Donaldson, Guy [Donaldson.Guy@epa.gov]
Subject: R5 Sterigenics facility
Attachments: 2018 June 21 Region 5 EtO Briefing.docx; Ethylene Oxide Short Term Air Monitoring Results Briefing 06202018.pptx

Dr. Brown asked for more info. on the Sterigenics facility (in particular, steps EPA or IEPA may be taking to control emissions). This is the only information I have, but I'm not sure how much can be shared.

I put in a call to Sara Breneman and Margaret Sieffert in R5 to see what the current status is, and I'll let you know when I hear back.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Verhalen, Frances
Sent: Thursday, June 21, 2018 4:08 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: Draft Sterigenics news release

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

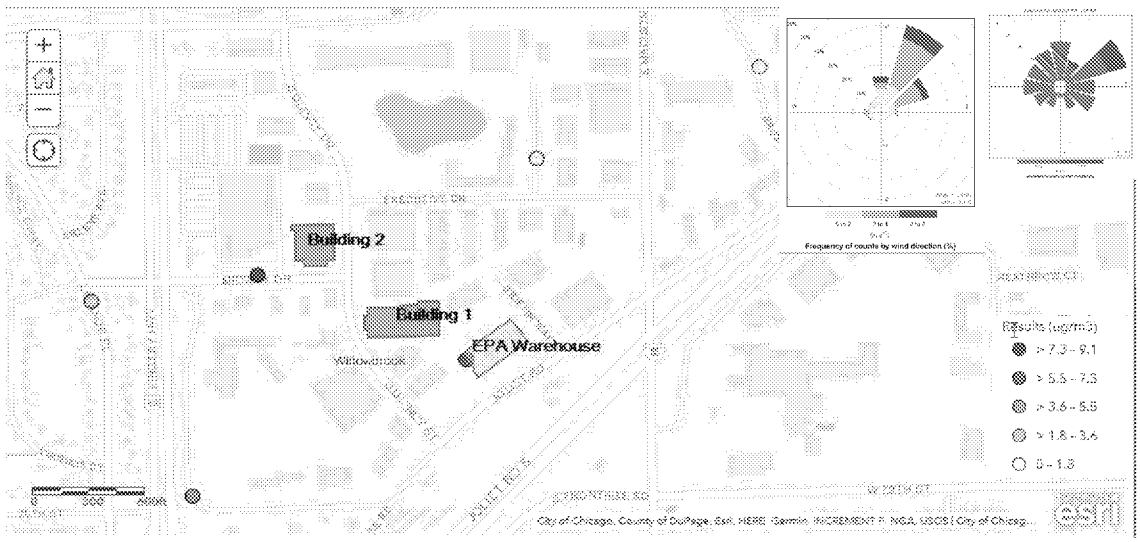
From: Gray, David
Sent: Thursday, June 21, 2018 1:45 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: Draft Sterigenics news release

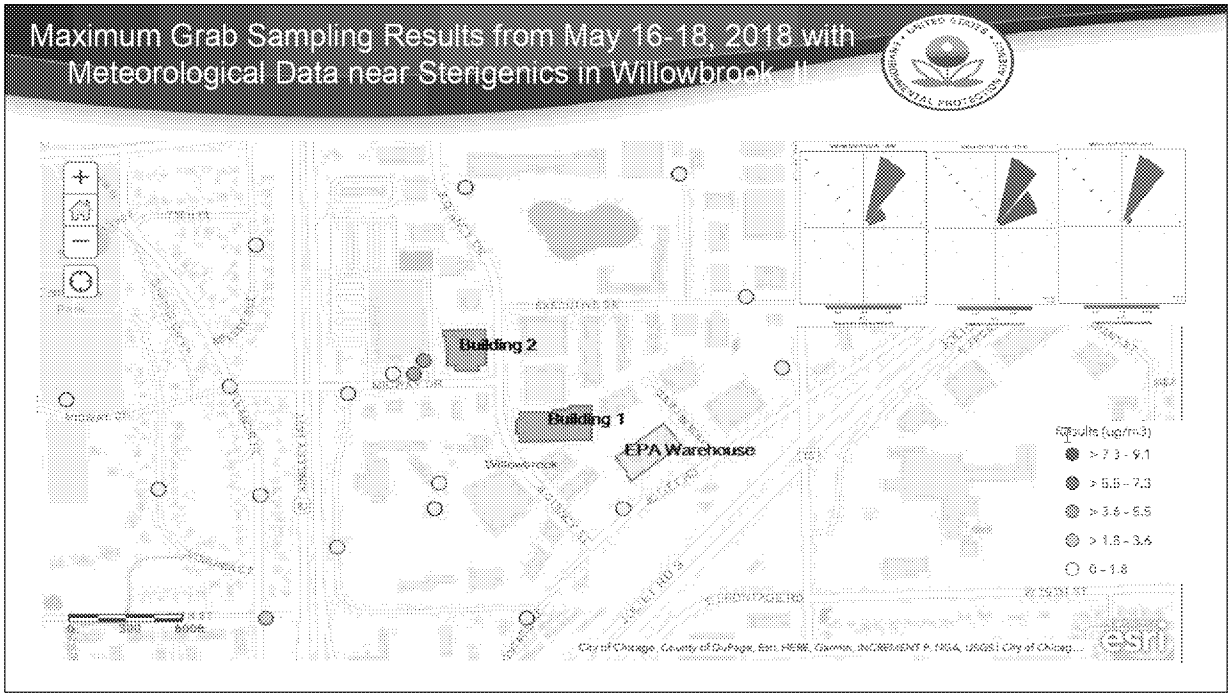
Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Jeff Kelley
Director, Office of External Communications
U.S. EPA Region 5
ph: 312-353-1159

Maximum 12 hour Composite Sampling Results from May 16-18, 2018 with Meteorological Data near Sterigenics in Willowbrook, IL




Maximum Grab Sampling Results from May 16-18, 2018 with
Meteorological Data near Sterigenics in Willowbrook, IL
Building 2
Building 1
EPA Warehouse
Results (ug/m3)
> 7.3 - 9.1
> 5.5 - 7.3
> 3.6 - 5.5
> 1.8 - 3.6
0 - 1.8
esri

Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 8/20/2018 9:00:28 PM
To: Taheri, Diane [Taheri.Diane@epa.gov]; Bokun, Lisa [Bokun.Lisa@epa.gov]
CC: Donaldson, Guy [Donaldson.Guy@epa.gov]
Subject: FW: CLOSE HOLD: next steps on EtO facilities
Attachments: ATSDR Sterigenics EtO Consult Letter-final.pdf; ATT00001.htm; EtO info 080618.docx; ATT00002.htm

ATSDR white paper for R5.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Verhalen, Frances
Sent: Wednesday, August 08, 2018 4:10 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: FW: CLOSE HOLD: next steps on EtO facilities

CLOSE HOLD – DO NOT RELEASE

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Stenger, Wren
Sent: Wednesday, August 08, 2018 3:38 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fwd: CLOSE HOLD: next steps on EtO facilities

Wren Stenger, Director
Multimedia Division

Begin forwarded message:

> **From:** "Perez, Idalia" <Perez.Idalia@epa.gov>
> **Date:** August 7, 2018 at 11:26:00 AM CDT
> **To:** "Moraff, Kenneth" <Moraff.Ken@epa.gov>, "Hamjian, Lynne" <Hamjian.Lynne@epa.gov>, "Conroy, David" <Conroy.Dave@epa.gov>, "Filippelli, John" <Filippelli.John@epa.gov>, "Iglesias, Ariel" <Iglesias.Ariel@epa.gov>, "Fernandez, Cristina" <Fernandez.Cristina@epa.gov>, "Arnold, David"

<arnold.david@epa.gov>, "Banister, Beverly" <Banister.Beverly@epa.gov>, "Kemker, Carol" <Kemker.Carol@epa.gov>, "Mitchell, Ken" <Mitchell.Ken@epa.gov>, "Nam, Ed" <nam.ed@epa.gov>, "Furey, Eileen" <furey.eileen@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>, "Smith, Mark A." <Smith.Marka@epa.gov>, "Smith, John" <Smith.John@epa.gov>, "Hestmark, Martin" <Hestmark.Martin@epa.gov>, "Daly, Carl" <Daly.Carl@epa.gov>, "Morales, Monica" <Morales.Monica@epa.gov>, "Wood, MelanieL" <Wood.MelanieL@epa.gov>, "Adams, Elizabeth" <Adams.Elizabeth@epa.gov>, "Lakin, Matt" <Lakin.Matthew@epa.gov>, "Hamlin, Tim" <Hamlin.Tim@epa.gov>, "Hastings, Janis" <Hastings.Janis@epa.gov>
Cc: "Koerber, Mike" <Koerber.Mike@epa.gov>
Subject: CLOSE HOLD: next steps on EtO facilities

ADDs,
Attached are two documents. Both are **close hold**, please do not share.

1. Draft list of facilities for discussion on Wednesday's special purpose call.

2. ATSDR letter mentioned by Region 5 on the last EtO call. Below some contextual information:

   In June, after conducting modeling and monitoring around an ethylene oxide source (Sterigenics) in the suburbs of Chicago, Region 5 requested that ATSDR review the results and specifically answer the question: If modeled and measured EtO concentrations represent long-term conditions, would they pose a public health problem for people living and working in Willowbrook?

   ATSDR's assessment of that question is provided in the attached letter consult. Please keep it close hold. Note their findings and recommendations are specific to the Sterigenics facility in Willowbrook, Illinois.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

Message

From: Selzer, Paula [Selzer.Paula@epa.gov]
Sent: 8/22/2018 1:30:51 PM
To: Donaldson, Guy [Donaldson.Guy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; Taheri, Diane [Taheri.Diane@epa.gov]
Subject: FW: Emerging Health Concern in Region 6 -ATSDR Health Consult on Ethylene Oxide
Attachments: NATA Key Talking Points. 8.20.18 Version for States .docx; NATA preview 2018.pdf

All, I got a request from OAQPS (Alison) to talk this morning. Can someone be on the call as well?

Paula Selzer
Senior Policy Advisor, Children's Environmental Health
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202

214-665-6663

From: Young, Patrick
Sent: Wednesday, August 22, 2018 7:50 AM
To: Ashley Whitlow <Ashley.Whitlow@arkansas.gov>; Bojes,Heidi (DSHS <Heidi.Bojes@dshs.texas.gov>; 'Borron, Stephen' <Stephen.Borron@ttuhsc.edu>; 'David Baker' <David.Baker@BSWHealth.org>; Davis, Alison <Davis.Alison@epa.gov>; Dianne Dugas <Dianne.Dugas@LA.GOV>; 'Edd Rhoades' <EDDR@health.ok.gov>; Gray, David <gray.david@epa.gov>; 'Hall,Emily (DSHS)' <Emily.Hall@dshs.texas.gov>; Heidi.Krapfl@state.nm.us; Hoogheem,Jeff (DSHS <Jeff.Hoogheem@dshs.state.tx.us>; 'Howell Foster <hrfoster@uams.edu>; Jaramillo, Jeanie <Jeanie.Jaramillo@ttuhsc.edu>; 'Jean Cole' <jcole@UTMB.EDU>; Jorie Klein <JORIE.KLEIN@phhs.org>; Joshi Prashant <prashant.joshi@ttuhsc.edu>; kathleen.aubin@la.gov; Kelly Hogue <KELLY.HOGUE@phhs.org>; lawhite@tulane.edu; Lori Simmons <Lori.Simmons@arkansas.gov>; Lyke, Jennifer L. (ATSDR/DCHI/CB <jlf1@cdc.gov>; McElvany, Rocky <RockyM@health.ok.gov>; MELODY.GARDNER@phhs.org; Morton, Michael <Morton.Michael@epa.gov>; MRyan@lsuhsc.edu; SBaeza@umcelpaso.org; Scott-Schaeffer@ouhsc.edu; Selzer, Paula <Selzer.Paula@epa.gov>; sharilyn.stanley@csec.texas.gov; Sproat, Scott M. <ScottS@health.ok.gov>; 'ssmolinske@salud.unm.edu'; Taheri, Diane <Taheri.Diane@epa.gov>; Veronica Stoller <stoller@uthscsa.edu>; 'wbanner@aol.com'
Subject: FW: Emerging Health Concern in Region 6 -ATSDR Health Consult on Ethylene Oxide

All,

Another piece to the puzzle. ATSDR in Region 5 released yesterday an ATSDR Health Consultation on an analysis of environmental air data associated with ethylene oxide emissions from a site identified as Sterigenics International, Inc., located in Willowbrook, Illinois. I'm including the link for your review. In summary, it appears air samples were collected in and around a facility and community in 2018. ATSDR findings concluded the site posed a public health hazard. https://www.atsdr.cdc.gov/HAC/pha/sterigenic/Sterigenics_International_Inc-508.pdf

Based on the EPA National Air Toxics Assessment (NATA) report, the assumptions might be made that similar facilities that release ethylene oxide emissions (producers/users) with similar air emission conditions as the Sterigenics site identified through NATA, might pose a health hazard if environmental sampling is conducted? Currently, I am unaware as far as next steps with respect to environmental agencies to collect or review any site specific environmental emission data from those site that use or produce ethylene oxide in Region 6, similar to the Illinois site. That issue, will more than likely will be addressed in the very near future.

In the meantime, prudent public health measures should continue to be crafted in Region 6. Continue coordination and collaboration with state health authorities and environmental agencies. Talking points addressing public

health/community health/occupational health concerns to should be developed and universally shared. Poison Control Centers should continue developing methodologies to address community health concerns to include occupational health exposure questions and prepare Specialist in Poison Information (SPI) to be able to address community health concerns. Medical/health referral mechanism should also be crafted to better assist the Poison Control Centers triage calls accordingly. Where to go for general questions, for example… acute, chronic, occupational, oncology, community health, environmental, pediatric, veterinary, media etc. Each state may want to start outlining a plan of action in order to stay ahead of any future environmental sampling on ethylene oxide that may result in a public health hazard finding. This is my professional opinion as your ATSDR Regional Representative.

As Poison Control Centers craft/develop role out strategies on addressing this issue. Can you please share with this group email so all are aware.

ATSDR R6 is here to offer any technical support needed by the State and Poison Centers.

CAPT Patrick Young, MS, RS
U.S. Public Health Service
ATSDR R6 Regional Rep
Division of Community Health Investigation
Dallas, Texas
214-665-8562 (o)

From: Young, Patrick
Sent: Tuesday, August 21, 2018 10:05 AM
To: MRyan@lsuhsc.edu; 'Howell Foster (hrfoster@uams.edu)' <hrfoster@uams.edu>; Scott-Schaeffer@ouhsc.edu; 'ssmolinske@salud.unm.edu' <ssmolinske@salud.unm.edu>; SBaeza@umcelpaso.org; Jaramillo, Jeanie <Jeanie.Jaramillo@ttuhsc.edu>; 'villarealc@uthsca.edu' <villarealc@uthsca.edu>; 'cjorie.klein@phhs.org' <cjorie.klein@phhs.org>; MELODY.GARDNER@phhs.org; 'Jean Cole' <jcole@UTMB.EDU>; 'David Baker' <David.Baker@BSWHealth.org>; Stephen.Fischer@state.nm.us <Stephen.Fischer@state.nm.us>; Dianne Dugas <Dianne.Dugas@LA.GOV>; Hoogheem,Jeff (DSHS) <Jeff.Hoogheem@dshs.state.tx.us>; lawhite@tulane.edu; Lori Simmons <Lori.Simmons@arkansas.gov>; McElvany, Rocky <RockyM@health.ok.gov>; Sproat, Scott M. <ScottS@health.ok.gov>; 'Dianne Dugas' <Dianne.Dugas@LA.GOV>; Bojes,Heidi (DSHS) <Heidi.Bojes@dshs.texas.gov>; Heidi.Krapfl@state.nm.us; 'Edd Rhoades' <EDDR@health.ok.gov>; 'Borron, Stephen' <Stephen.Borron@ttuhsc.edu>; 'Hall,Emily (DSHS)' <Emily.Hall@dshs.texas.gov>; Ashley Whitlow <Ashley.Whitlow@arkansas.gov>; Kathleen.Aubin@LA.GOV; 'wbanner@aol.com' <wbanner@aol.com>
Cc: Davis, Alison <Davis.Alison@epa.gov>; Morton, Michael <Morton.Michael@epa.gov>; Gray, David <gray.david@epa.gov>; Selzer, Paula <Selzer.Paula@epa.gov>; Taheri, Diane <Taheri.Diane@epa.gov>; Lyke, Jennifer L. (ATSDR/DCHI/CB) <jlf1@cdc.gov>
Subject: Emerging Health Concern in Region 6 - EPA report on Ethylene Oxide and associated cancer rates

Greetings Region 6 Poison Control Center Directors and State Health Representative,

ATSDR Region 6 just became aware of a pending EPA report from the National Air Toxics Assessment (NATA) air modeling group, identifying **ethylene oxide** as an increased cancer risk to some communities. **This report will hit the streets tomorrow.** You can access this report through the web link provided in the talking points attachment. This will be a chronic health issue. And it appears the air releases are primarily from the manufacturing process and subsequent atmospheric air release associated with production of ethylene oxide. The air data was collected in 2014 and being summarized now for the public.

From the EPA National perspective, 19 cities were identified as having elevated cancers risk $\geq$ 100-in-1 million. Out of the 19 Cities, there were 8 Cities identified in our Region, Region 6. (New Orleans-Metairie, LA; Lake Charles, LA; Baton Rouge, LA; Marshall, TX; Beaumont-Port Arthur, TX; Houston-The Woodlands-Sugar

Land, TX; Laredo, TX; Las Cruces, NM). It was reported that fewer than 1% of the census tracts in the country (106 tracks in 19 metropolitan statistical areas) have the estimated cancer risk of ≥ 100-in-1 million.

In order to address potential community health concerns (citizens, clinicians, oncologist, community, family, children, etc.) I would like to propose the following strategy:

Public Health Strategy

1. Notify each State Health Authority and R6 PCC of pending EPA report. Share all talking points with the State Health Authority/PCC.
2. Stand up the Poison Control Centers in Region 6 to serve as the initial call center to collect any medical/health calls from the community concerned with ethylene oxide.
3. Poison Centers can triage public calls and determine level of escalation (State Health, City Health, EPA, ATSDR, DHHS, AOEC Clinic, etc).
4. Children's Health Questions can be directed to our R6 PEHSU- with Dr. Borron)
5. Request the Poison Control Center to create a computer code to allow for extraction of data calls from their system. (should be a national code)
6. Request the each State Poison Center to develop a situation report at the end of each week to capture/reflect number and kind of calls received by the public. Provided situation report to State Health authorities and federal agencies (weekly for now)
7. ATSDR R6 will work to draft template for Situation Report.
8. ATSDR R6 staff (Jennifer Lyke and CAPT Patrick Young) will serve as a liaison with R6 PCC/State Health and EPA to provide public health support.
   https://www.atsdr.cdc.gov/ToxProfiles/tp137.pdf
   https://www.atsdr.cdc.gov/toxfaqs/tfacts137.pdf

Suggested EPA Strategy to Support Public Health

1. Include key health stakeholders in information roll out process.
2. Share environmental data, information, maps etc. with key stakeholders.
3. Any information shared by EPA with the public on ethylene oxide, to direct public health/medical concerns to the Poison Control Center national phone number 1-800-222-1222.
4. EPA should coordinate with the American Association of Poison Control Centers (AAPCC) through Dr. Bannor, President of AAPCC and Dr. Mark Ryan, Louisiana PCC Director. Dr. Ryan can facilitate with other Poison Centers outside of Region 6 (National Perspective)

Respectfully,

CAPT Patrick Young, MS, RS
U.S. Public Health Service
ATSDR R6 Regional Rep
Division of Community Health Investigation
Dallas, Texas
214-665-8562 (o)

Talking Points on Upcoming NATA Release. Note: These are not for posting to web but will be covered in a fact sheet.

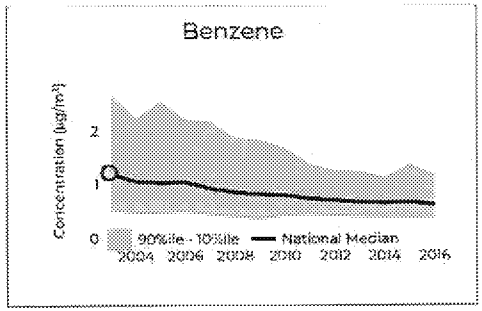
- **On Wednesday, EPA will release the National Air Toxics Assessment, or NATA, for 2014**.
- **NATA is EPA's air toxics screening tool**. It uses emissions information to estimate exposure and risk from breathing air toxics.
- The purpose of NATA is to help EPA, and state, local and tribal agencies decide if areas, pollutants or types of sources need to be examined further.
- **Nationwide, levels of air toxics are decreasing,**
    - EPA's recent trends report showed air toxic levels trending downward - i.e., ambient monitoring data show that many air toxic air pollutants, such as benzene, are declining at most sites
- **But local areas still face challenges, and this most recent NATA shows that a number of areas could have elevated cancer risks from long-term exposure (many years) to the chemical *ethylene oxide*.**
- **These elevated risks are largely driven by an EPA risk value that was updated in late 2016.**
- **The estimates in NATA are for chronic exposures over many decades. NATA does not estimate short-term (acute) or intermediate risks.**
    - Ethylene oxide is used to sterilize equipment and plastic devices that can't be sterilized with steam, such as medical devices. It also is used to make other chemicals.
        - One of those is ethylene glycol, which is used to make everyday products such as antifreeze, PVC plumbing pipe, vinyl flooring and plastics products, including recyclable plastic containers and bottles.
- **EPA does two things when we see elevated risks in NATA:**
    - **First, the Clean Air Act regulatory program for air toxics requires EPA to reduce significant risk. So the agency has begun reviewing its regulations for facilities that emit ethylene oxide.**
    - **Second, if risks appear to be high enough, EPA will take a closer look** -- getting more information to tell the agency if it needs to take action sooner.
- **EPA will post information on efforts to address ethylene oxide on the web. The address will be** [HYPERLINK "https://www.epa.gov/ethylene-oxide"]
- **The NATA website, including information on uses and limitations, will be posted at** [HYPERLINK "https://www.epa.gov/national-air-toxics-assessment"]

What is NATA?

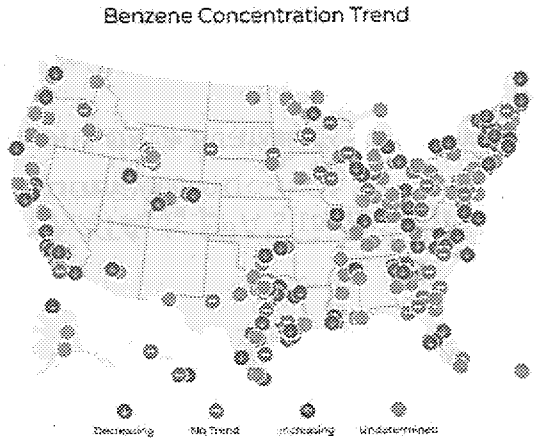
- The National Air Toxics Assessment, or NATA, is EPA's thorough review of air toxics in the United States, based on modeled air quality.
- NATA uses the best science and emissions data available to estimate health risks from air toxics.
- NATA is national in scale and intended as a *screening tool.*
- NATA can be used by the EPA and states/locals and tribes to help determine what pollutants or areas of the country to investigate further, to better understand risks.
- NATA should <u>not</u> be used:
  - to pinpoint risk or exposure values at a specific place (like a home or school);
  - to characterize or compare risks or exposures at local levels (such as between neighborhoods);
  - as the sole basis for risk reduction plans or regulations, or
  - to control specific sources or pollutants.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00001

National air toxics trends are downward



Our Nation's Air: Status and Trends Through 2017 : Benzene (2003 – 2017)



EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00002

2014 NATA Analytical Steps

Compile National Emissions Inventory (2014 NEI)

2014 NEI includes stationary, mobile and natural sources (fires, biogenics).

NATA includes 180 listed air toxics plus diesel particulate matter (PM)

Estimate ambient concentrations of air toxics across the U.S.

Uses CMAQ and AERMOD to predict census-tract ambient concentrations nationwide.

Estimate population exposures

Includes an exposure model (HAPEM7) to account for human activity data, commuting patterns, and near-roadway exposures.

Characterize potential public health risks from inhalation

Census-tract level cancer and noncancer risks nationwide.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00003

What data are included in NATA?

- NATA provides screening-level estimates of the risk of cancer and other serious health effects from breathing (inhaling) air toxics.
- This helps show which air toxics and source types may contribute to health risks in certain places.
- NATA results are reported at the census tract level.
- The 2014 NATA includes estimates of ambient and exposure concentrations for 180 listed air toxics plus diesel PM, which we assess for noncancer effects only.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00004

How can states/locals and tribes use NATA?

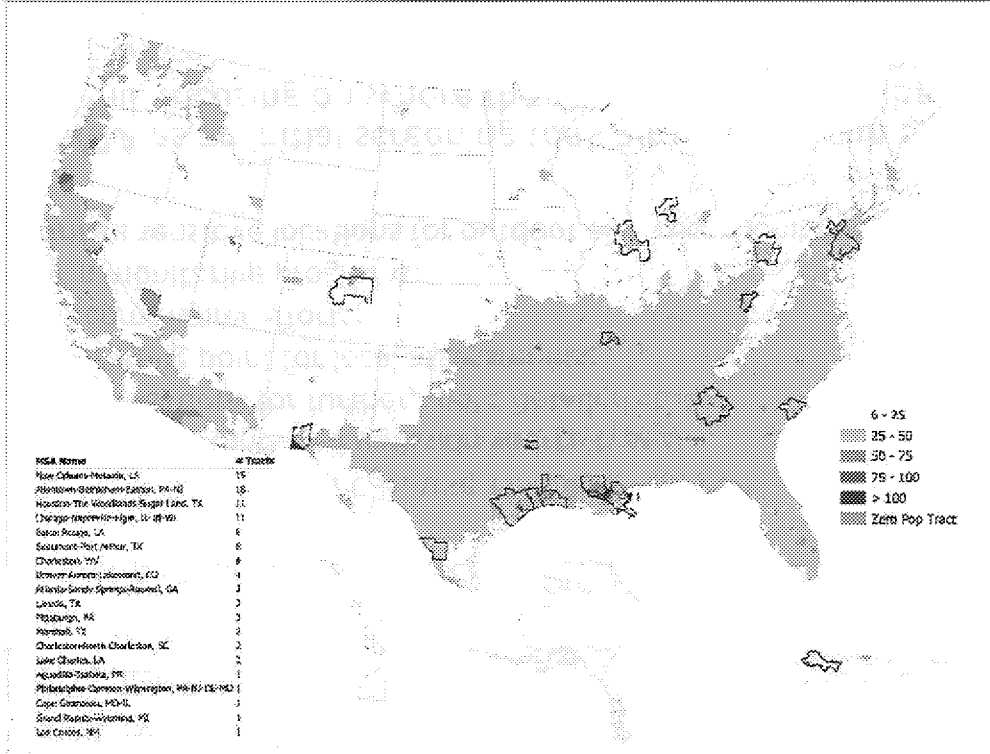
- States/locals and tribes can use NATA results to:
  - prioritize pollutants and emission source types;
  - identify locations for further, more detailed study;
  - get a starting point for local assessments;
  - focus community efforts;
  - inform monitoring programs;
  - prioritize sensitive locations for outdoor air toxics monitoring.

- Using NATA as an initial screening tool, air agencies can then study areas in more detail, focusing on where the risks to people may be greatest.
  - They may also choose to perform a smaller scale local assessment, which allows them to use more detailed data than we can in NATA.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00005

2014 NATA Results: National Average Cancer Risk

2014 NATA



MSA Name	# Tracts
New Orleans-Metairie, LA	15
Allentown-Bethlehem-Easton, PA-NJ	13
Houston-The Woodlands-Sugar Land, TX	11
Chicago-Naperville-Elgin, IL-IN-WI	11
Baton Rouge, LA	6
Beaumont-Port Arthur, TX	6
Charleston, WV	4
Denver-Aurora-Lakewood, CO	4
Atlanta-Sandy Springs-Roswell, GA	3
Laredo, TX	3
Pittsburgh, PA	3
Hanford, CA	3
Charleston-North Charleston, SC	2
Lake Charles, LA	2
Aguadilla-Isabela, PR	1
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1
Cape Coral-Naples, FL	1
Grand Rapids-Wyoming, MI	1
Las Cruces, NM	1

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00006

19 MSAs with Elevated Cancer Risks (≥100-in-1 million)

2014 NATA

MSA	# tracts ≥100 in 1 million	highest risk tract in MSA (in 1 million)	MSA	# tracts ≥100 in 1 million	highest risk tract in MSA (in 1 million)
New Orleans-Metairie, LA**†	19	2,000	Pittsburgh, PA**†	3	100
Allentown-Bethlehem-Easton, PA-NJ	18	600	Charleston-North Charleston, SC	2	100
Chicago-Naperville-Elgin, IL-IN-WI†	11	300	Lake Charles, LA	2	100
Houston-The Woodlands-Sugar Land, TX	11	300	Marshall, TX	2	200
Baton Rouge, LA	9	200	Aguadilla-Isabela, PR	1	300
Beaumont-Port Arthur, TX	8	300	Cape Girardeau, MO-IL	1	200
Charleston, WV	6	400	Grand Rapids-Wyoming, MI	1	100
Denver-Aurora-Lakewood, CO†	4	500	Las Cruces, NM	1	200
Atlanta-Sandy Springs-Roswell, GA	3	200	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD†	1	100
Laredo, TX	3	100			

** With the exception of New Orleans-Metairie, LA (chloroprene) and Pittsburgh, PA (coke oven emissions), the primary risks are driven by emissions of ethylene oxide from point sources.

† The following 5 MSAs were also in the 2011 NATA as MSAs with elevated cancer risks: Chicago-Naperville-Elgin, IL-IN-WI; Denver-Aurora-Lakewood, CO; New Orleans-Metairie, LA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, and Pittsburgh, PA.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00007

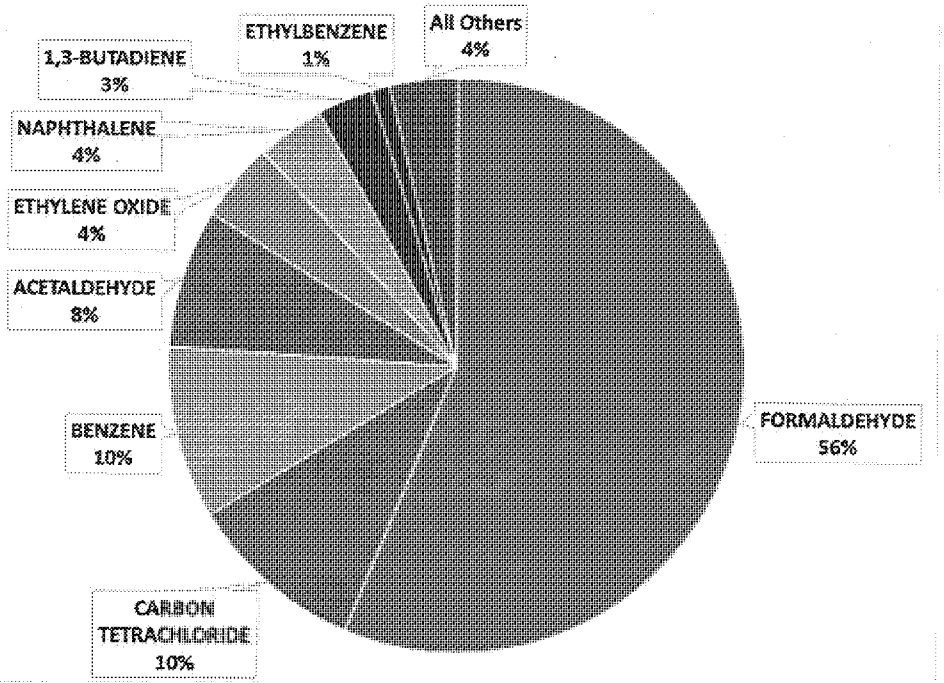
What NATA tells us

- National average cancer risk estimated to be 30-in-1 million.
- Fewer than 1% of the census tracts in the country (106 tracts in 19 metropolitan statistical areas) have an estimated cancer risk of ≥ 100-in-1 million.
- Tracts with estimated cancer risks of ≥ 100-in-1 million are primarily driven by point source emissions of ethylene oxide, chloroprene, and coke oven emissions.
- Secondary formation (formaldehyde and acetaldehyde) estimated to contribute about half of the national average cancer risk.
  - Secondary formation is from both anthropogenic (stationary and mobile) sources as well as biogenic sources.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00008

National Average Cancer Risk Pollutant Contributions (30-in-1 million)

2014 NATA



EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00009

New risk estimates for ethylene oxide

- EPA completed its review of available health information for ethylene oxide and classified ethylene oxide as a known human carcinogen in December 2016.
  - This work included an increase in the potency estimates for ethylene oxide, which are used to inform risk estimates in 2014 NATA.
- The 2014 NATA results suggest that ethylene oxide is a potential concern in several areas across the country.
- EPA has begun to gather additional information in identified areas, focusing first on those areas with the largest estimated potential for risk.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00010

Next Steps

- 2014 NATA will be rolled out soon, on the following website: *https://www.epa.gov/nata*
- To keep you informed as the EPA works to address ethylene oxide, a separate website will be updated regularly. The address will be *https://www.epa.gov/ethylene-oxide*
- We will send you a link to the preview SharePoint site this afternoon.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00000460-00011

Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 8/2/2018 1:52:25 PM
To: Stenger, Wren [stenger.wren@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]
CC: Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: NATA regional Communication Coordination
Attachments: 2014 NATA Release Coordination.docx

Wren, let me know what you think.

I did not include any information about the other facilities that are at 10-4 at the block level; those are on the attachment from Monday's ADD call. I can add if you think this is the correct time to do so.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Stenger, Wren
Sent: Thursday, August 02, 2018 8:13 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Subject: RE: NATA regional Communication Coordination

Fran, would you send me a draft response? I have a 1 pm with David and would like to see if he agrees.

List our MSA, the 3 facilities, and our basis for this. Say that this is the minimum we will do in the short-term and both Texas and Lousiana have requested coordination now and that we agree that state coordination is needed without delay. The state coordination may lead to additional facility actions in the short term.

From: Verhalen, Frances
Sent: Thursday, August 02, 2018 8:03 AM
To: Stenger, Wren <stenger.wren@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: NATA regional Communication Coordination

Wren, Lisa, and Guy,
On an EtO subgroup call yesterday, the primary topic was the NATA roll-out.

- OAQPS is asking that each Region designate a lead communications coordinator for the NATA work. They are asking for this name by COB today (8/2/18) to be sent to Darcie Smith and Mike Koerber.

- OAQPS is asking that each Region determine which facilities greater than 10^{-4} risk will be the primary focus to start. They are asking for this information by COB today (8/2/18) to be sent to Darcie Smith and Mike Koerber. [NOTE: R6 has been in communication with Mike Koerber and will present this information on Monday 8/6/18.]
- OAQPS requested that the Regions define how they chose the facilities for priority. The probable reasons are:
    - highest cumulative risk within an MSA;
    - highest cumulative risk within a census tract;
    - highest EI;
    - largest population affected.
    - Other reasons should be described.
- The chart of facilities provided during the ADD meeting (attached) includes all identified EtO facilities with a risk greater than 100 in 1,000,000 for the census BLOCK level. Many of these are not above this risk at the Tract level.
- OAQPS will have calls with states prior to the NATA roll-out. No specific date for roll-out was provided. At this time, we can discuss with our states things dealing with emission inventories and operating status/units but no risk yet.

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From: Stenger, Wren [stenger.wren@epa.gov]
Sent: 8/2/2018 4:44:23 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]
CC: Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: NATA regional Communication Coordination
Attachments: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

I made a few edits. Nothing significant. I will share this with David today and see if he is ok with it.

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Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/17/2018 1:39:44 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Monday, July 16, 2018 5:52 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO emission numbers

Hi Darrin –

Welcome back!! Sadly, you haven't missed anything in terms of progress on NATA.

The V2 spreadsheet that you're referring to only contained *block* level estimates of ethylene oxide risks from *point* sources. The complete NATA results (which you don't have) contain *tract* level risks for all pollutants from *all* sources. At the time we shared that data with you, we did not have tract level results for V2, so we provided our best estimate (as explained in the accompanying document) of what the V2 tract risks would be when available. To do this we used the hybrid ratio of AERMOD & CMAQ for each tract from V1 (the block and tract level results for V1 were also provided in the spreadsheet for reference). But it was still only an estimate. That's why we provided all the facilities, not just those with a "yes." (Also, some regions are interested in high block level results even if they're not going to show up in NATA.)

Since we now have the full NATA results, we've been able to do a little digging into each census tract with an elevated risk and found the list of 9 facilities that we shared with you in the slides, mostly one per MSA. That doesn't mean that list is exhaustive. That just means that our first pass through found them. Ideally, you would do more digging when results are available, and you may find additional facilities you wish to examine. NATA just points out areas, not facilities, and is the starting point for further investigation. Does that help explain the difference in the two lists?

I know you're probably wondering when you'll have full results to start in on and I wish I could answer that question, but right now I do not know the answer. Once that happens, we'll be happy to work with you to try and "finalize" the list of facilities, however many happen to be on it. Thank you for not sharing the risk numbers with your states just yet. I remain optimistic that once we get the go ahead to share with you, we'll also be allowed to share the numbers with the states. Let us know if you have additional questions.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Larson, Darrin
Sent: Monday, July 16, 2018 1:38 PM
To: Langdon, Robin <Langdon.Robin@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: EtO emission numbers

Hi Robin and Darcie,

I'm back in the office and getting caught up, and trying to understand Darcie's response, which came in while I was out.

The V2 spreadsheet we had been using to plan and to brief our managers prior to the OAQPS June 14 briefing contained 20 EtO facilities in R6 states. It was a V2 spreadsheet Darcie sent to the regions on March 15, 2018. Of the 20 facilities, 13 had a yes in the column, "Is Census Tract Cancer Risk Expected to be > 100 in 1-million in V2?"

In the PowerPoint OAQPS used for the June 14 briefing, there are 9 EtO facilities listed with elevated risk, so our senior managers asked us why OAQPS had 9 EtO facilities in the PP and we had 13 in the V2 spreadsheet we had shared earlier. In advance of the briefing, OAQPS had mentioned that there was a revised list expected soon, so we all thought the list of 9 was the revised list. We shared the 9 names with the states (not the risk numbers), and asked you for the emission data to go with the 9.

Can you help us understand how you came up with the list of 9? If it's not based on new emission data, as we assumed, how did you cut the V2 list of 13 down to 9?

Thanks,

Darrin

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Smith, Darcie
Sent: Thursday, June 28, 2018 5:32 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: EtO emission numbers

Hi Cindy –

You guys are hitting all fronts! I've heard from Josh and Anupa as well, so please share with them too.

You are not missing anything; nothing has been sent. There is not any new emissions data from what is in that EtO spreadsheet. There has not been an official NATA update released. The only thing you have is the information in the slides at this point other than the EtO spreadsheet with our estimate of what risks to expect in v2. All that information is still current since no changes have been received for those facilities (as shown in the slides).

As for maps, there's the one in the slides with all the MSAs in Region 6 and then the one in the specific area in LA. Was there something else specific you're thinking of? Let me know.

Hope that helps somewhat.

Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Thursday, June 28, 2018 11:55 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Good Morning, Darcie,

I'm just checking with you to see if there is an official NATA update that's been issued yet? All we've heard is the informal information sent to our Air Enforcement Section Chief Darrin Larson (see below;)
I feel like we should be doing something, and instead, we're waiting? We are trying to pull together maps showing these facilities, but I'm also guessing the professional map-makers there, probably already have detailed graphics?
Was something else sent out and did we miss it?
Thank you,
Cindy Parker

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM
To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

Robin Langdon of OAQPS called me after our conf. call yesterday, to discuss when OAQPS could provide us with the latest emission data for the 9 facilities on the slides OAQPS shared with us during the June 14 briefing. She said they need to brief Wehrum prior to sharing the latest information (risk numbers, etc.), but agreed to provide us the emission numbers on Monday. We can share the emissions data with the states, but she asked that EPA and the states hold off on reaching out to the facilities using this newest data until after the Wehrum briefing, which is set for next Wednesday.

Here is the current list of 9 EtO facilities:

Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana
Port Neches Plant (Huntsman Corp.)	Texas
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana
Shell Technology Center Houston	Texas
BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Appointment

From: Perez, Idalia [Perez.Idalia@epa.gov]
Sent: 8/8/2018 9:18:56 PM
To: Perez, Idalia [Perez.Idalia@epa.gov]; Koerber, Mike [Koerber.Mike@epa.gov]; Whitlow, Jeff [Whitlow.Jeff@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Sasser, Erika [Sasser.Erika@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]; Shaw, Betsy [Shaw.Betsy@epa.gov]; Air Division Directors and Deputies [Air_Division_Directors_and_Deputies@epa.gov]; Wortman, Eric [Wortman.Eric@epa.gov]; Davidson, Ken [Davidson.Ken@epa.gov]; Fiedler, Kerri [Fiedler.Kerri@epa.gov]; Olson, Kyle [Olson.Kyle@epa.gov]; Matichuk, Rebecca [Matichuk.Rebecca@epa.gov]; Louis, Egide [Louis.Egide@epa.gov]; Rinck, Todd [Rinck.Todd@epa.gov]; Worley, Gregg [Worley.Gregg@epa.gov]; Harris-Young, Dawn [Harris-Young.Dawn@epa.gov]; Shappley, Ned [Shappley.Ned@epa.gov]; Wayland, Richard [Wayland.Richard@epa.gov]; Mylott, Richard [Mylott.Richard@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Lessard, Patrick [Lessard.Patrick@epa.gov]; Davis, Alison [Davis.Alison@epa.gov]; Lancey, Susan [lancey.susan@epa.gov]; Bellizzi, Carol [Bellizzi.Carol@epa.gov]; Chow, Alice [chow.alice@epa.gov]; Sieffert, Margaret [Sieffert.Margaret@epa.gov]; Doolan, Stephanie [Doolan.Stephanie@epa.gov]; Glass, Geoffrey [GLASS.GEOFFREY@EPA.GOV]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Siegel, Kathryn [siegel.kathryn@epa.gov]; Cain, Alexis [cain.alexis@epa.gov]

Subject: Special Purpose Call: NATA - Next steps on EtO facilities
Attachments: Copy of Facility checklist_Aug13.edit1.xlsx
Location: Line 866-299-3188 code: 707-6865#

Start: 8/13/2018 4:00:00 PM
End: 8/13/2018 5:00:00 PM
Show Time As: Busy

Required Attendees: Koerber, Mike; Whitlow, Jeff; Smith, Darcie; Sasser, Erika; Jones, Rhea; Rimer, Kelly; Shaw, Betsy; Air Division Directors and Deputies; Wortman, Eric; Davidson, Ken; Fiedler, Kerri; Olson, Kyle; Matichuk, Rebecca; Louis, Egide; Rinck, Todd; Worley, Gregg; Harris-Young, Dawn; Shappley, Ned; Wayland, Richard; Mylott, Richard; Palma, Ted; Lessard, Patrick; Davis, Alison; Lancey, Susan; Bellizzi, Carol; Chow, Alice; Sieffert, Margaret; Doolan, Stephanie; Glass, Geoffrey
Optional Attendees: Verhalen, Frances; Madden, Joshua; Siegel, Kathryn; Cain, Alexis

Update: Adding materials and short agenda.

Agenda

- Updated list
- hybrid strategy elements
- NATA rollout schedule

Appointment

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/13/2018 5:11:38 PM
To: Donaldson, Guy [Donaldson.Guy@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
BCC: R6-ConfRm-RioGrande-11B15/R6---11th-Floor [R6-ConfRm-RioGrande-11B15@epa.gov]

Subject: NATA emissions numbers
Attachments: 2014 NATA Results by Region.pptx
Location: R6-ConfRm-RioGrande-11B15/R6---11th-Floor

Start: 8/13/2018 7:30:00 PM
End: 8/13/2018 8:00:00 PM
Show Time As: Busy

Required Attendees: Thompson, Steve; Larson, Darrin; Madden, Joshua; Ahuja, Anupa; Parker, Cindy

Just got off an Air Division Director's call and OAQPS is really pressing to make sure the emissions numbers are confirmed because Bill W. wants to release the week of 8/27.

Looked like most folks were available.

I would like to discuss current status and see if we can divide and conquer.

Appointment

From: Perez, Idalia [Perez.Idalia@epa.gov]
Sent: 7/23/2018 9:07:41 PM
To: Perez, Idalia [Perez.Idalia@epa.gov]; Adams, Elizabeth [Adams.Elizabeth@epa.gov]; Arnold, David [arnold.david@epa.gov]; Banister, Beverly [Banister.Beverly@epa.gov]; Bray, Dave [Bray.Dave@epa.gov]; Conroy, David [Conroy.Dave@epa.gov]; Daly, Carl [Daly.Carl@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Fernandez, Cristina [Fernandez.Cristina@epa.gov]; Filippelli, John [Filippelli.John@epa.gov]; Hamjian, Lynne [Hamjian.Lynne@epa.gov]; Hamlin, Tim [Hamlin.Tim@epa.gov]; Hastings, Janis [Hastings.Janis@epa.gov]; Hestmark, Martin [Hestmark.Martin@epa.gov]; Iglesias, Ariel [Iglesias.Ariel@epa.gov]; Jay, Michael [Jay.Michael@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]; Kemker, Carol [Kemker.Carol@epa.gov]; Koerber, Mike [Koerber.Mike@epa.gov]; Kornylak, Vera S. [Kornylak.Vera@epa.gov]; Lakin, Matt [Lakin.Matthew@epa.gov]; Lewis, Josh [Lewis.Josh@epa.gov]; Mathias, Scott [Mathias.Scott@epa.gov]; Mooney, John [Mooney.John@epa.gov]; Moraff, Kenneth [Moraff.Ken@epa.gov]; Morales, Monica [Morales.Monica@epa.gov]; Nam, Ed [nam.ed@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Smith, John [Smith.John@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]; Tsirigotis, Peter [Tsirigotis.Peter@epa.gov]; Wayland, Richard [Wayland.Richard@epa.gov]; Weber, Rebecca [Weber.Rebecca@epa.gov]; Whitlow, Jeff [Whitlow.Jeff@epa.gov]; Wood, Anna [Wood.Anna@epa.gov]; Wood, MelanieL [Wood.MelanieL@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Truesdell, Raymond [truesdell.raymond@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Cozzie, David [Cozzie.David@epa.gov]; Davis, Alison [Davis.Alison@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]; Riha, Kristin [Riha.Kristin@epa.gov]; Rodman, Sonja [Rodman.Sonja@epa.gov]; Anderson, Lea [anderson.lea@epa.gov]; Sasser, Erika [Sasser.Erika@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Bradley, Megan [Bradley.Megan@epa.gov]

Subject: (close hold) Special Purpose Call: Ethylene Oxide Potential Health Risks/NATA Results
Attachments: 2014 NATA Results by Region.pptx; 2014 NATA Results Summary_Special Purpose Call.pptx
Location: Line 866-299-3188 code: 707-6865#

Start: 7/24/2018 7:00:00 PM
End: 7/24/2018 8:00:00 PM
Show Time As: Tentative

Required Attendees: Adams, Elizabeth; Arnold, David; Banister, Beverly; Bray, Dave; Conroy, David; Daly, Carl; Donaldson, Guy; Fernandez, Cristina; Filippelli, John; Hamjian, Lynne; Hamlin, Tim; Hastings, Janis; Hestmark, Martin; Iglesias, Ariel; Jay, Michael; Jones, Rhea; Kemker, Carol; Koerber, Mike; Kornylak, Vera S.; Lakin, Matt; Lewis, Josh; Mathias, Scott; Mooney, John; Moraff, Kenneth; Morales, Monica; Nam, Ed; Price, Lisa; Smith, John; Stenger, Wren; Tsirigotis, Peter; Wayland, Richard; Weber, Rebecca; Whitlow, Jeff; Wood, Anna; Wood, MelanieL; Langdon, Robin; Smith, Darcie; Truesdell, Raymond; Palma, Ted; Caparoso, Jennifer; Strum, Madeleine; Cozzie, David; Davis, Alison; Bremer, Kristen; Riha, Kristin; Rodman, Sonja; Anderson, Lea; Sasser, Erika
Optional Attendees: Verhalen, Frances; Bradley, Megan

Update 2: The slide deck contained an outdated slide. Corrected slides attached.
Update: Adding materials.
Confirming the correct 3ET/12PT call.

Purpose: To discuss potential EtO health risks identified through NATA results, and next steps in the NATA process.

Appointment

From: Sasser, Erika [Sasser.Erika@epa.gov]
Sent: 5/24/2018 7:38:19 PM
To: Sasser, Erika [Sasser.Erika@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]; Seager, Cheryl [Seager.Cheryl@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]; Gray, David [gray.david@epa.gov]; Vandenberg, John [Vandenberg.John@epa.gov]; Koerber, Mike [Koerber.Mike@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]
CC: Langdon, Robin [Langdon.Robin@epa.gov]; Wayland, Richard [Wayland.Richard@epa.gov]; Houyoux, Marc [Houyoux.Marc@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; McGee, Tomika [McGee.Tomika@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Taheri, Diane [Taheri.Diane@epa.gov]; Welton, Patricia [Welton.Patricia@epa.gov]; Chiang, I-Jung [chiang.i-jung@epa.gov]; Bokun, Lisa [Bokun.Lisa@epa.gov]; Harrison, Ben [Harrison.Ben@epa.gov]; Noonan, Jenny [Noonan.Jenny@epa.gov]

Subject: NATA Results Briefing for Region 6 - Room C501A - Phone 1(202) 991-0477 Conference I.D. 1200676 *ATTACHMENT*
Attachments: 2014 NATA Results Briefing for R6 staff.pptx
Location: RTP-OAQPS-C501A/RTP-OAQPS-BLDG-C

Start: 6/14/2018 7:00:00 PM
End: 6/14/2018 8:00:00 PM
Show Time As: Busy

Required Attendees: Sasser, Erika; Smith, Darcie; Palma, Ted; Strum, Madeleine; Bremer, Kristen; Seager, Cheryl; Stenger, Wren; Gray, David; Vandenberg, John; Koerber, Mike; Jones, Rhea
Optional Attendees: Langdon, Robin; Noonan, Jenny; Wayland, Richard; Houyoux, Marc; Verhalen, Frances; McGee, Tomika; Donaldson, Guy; Price, Lisa; Parker, Cindy; Madden, Joshua; Larson, Darrin; Ahuja, Anupa; Taheri, Diane; Welton, Patricia; Chiang, I-Jung; Bokun, Lisa; Harrison, Ben

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Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 7/26/2018 12:27:38 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
CC: Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: 2014 NATA DRAFT Denka Section July 25 2018.docx
Attachments: 2014 NATA DRAFT Denka Section July 25 2018.docx

My tweaks to Wren's write up. I went ahead and put the graph in.

Fran, please coordinate any other edits and return to Wren by COB today.

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 7/30/2018 12:51:06 PM
To: Baca, Michael, NMENV [michael.baca1@state.nm.us]
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Thank you.

Not sure how this will be characterized when NATA is released. NATA is based on 2014 emissions and these reductions happened afterword. Best case we will get modeling based on newer emissions. More likely the data for Sterigenics will be footnoted to explain the more recent reductions.

We will keep you guys posted as we get closer to the release.

From: Baca, Michael, NMENV [mailto:michael.baca1@state.nm.us]
Sent: Friday, July 27, 2018 10:17 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Hi Guy,

I spoke with the permit writer and the confirmed that the facility installed new equipment in 2015. They think the emission reductions were a result of the modification to the facility.

Thanks,

Mike

From: Donaldson, Guy <Donaldson.Guy@epa.gov>
Sent: Thursday, July 26, 2018 12:39 PM
To: Baca, Michael, NMENV <michael.baca1@state.nm.us>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Michael if you get a chance can you give me a call at 214-665-7242 regarding the Sterigenics facility in Santa Theresa.

You may or may not have heard, risk numbers associated with Ethylene Oxide have changed significantly and as a result, some of the Ethylene Oxide sources are showing up now in the coming National Air Toxics assessment.

We think based on the TRI data below and some permit info as well that the Sterigenics facility has reduced its emissions significantly and I just wanted to confirm that NMED is seeing the same thing.

From: Larson, Darrin
Sent: Thursday, July 26, 2018 1:02 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>

Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Monday, July 16, 2018 12:28 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

See the data from Mort. Point source emissions did go down from 2014.

From: Wakeland, Morton
Sent: Monday, July 16, 2018 12:18 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Stuckey, Troy <Stuckey.Troy@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?
Importance: High

Good afternoon Anupa

I was out most of last week, so am just getting back to this.

If this is the correct site in NM…

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:	STERIGENICS-SANTA TERESA FACILITY	Mailing Name:	STERIGENICS-SANTA TERESA FACILITY
Address:	2400 AIRPORT RD SANTA TERESA NM 88008	Mailing Address:	2015 SPRING ROAD, SUITE 650 OAK BROOK IL 60523
County:	DONA ANA	Region:	6
Facility Information:	View Facility Information	TRI ID:	88008GRFFT2400A
DUNS Number:	361309719	FRS ID	110000472541
TRI Preferred Latitude:	31.861111	TRI Preferred Longitude:	106.6875
Public Contact:	KATHLEEN HOFFMAN	Phone:	6309281758
Assigned Public Contact:	KATHLEEN HOFFMAN		
Parent Company:	STERIGENICS US LLC	Standardized Parent Company:	STERIGENICS US LLC
BIA Tribal Code:		Tribe:	

Parent DUNS: 098499569

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2016

NAICS CODE	PRIMARY	NAICS DESCRIPTION
561910	YES	Packaging and Labeling Services

Then here are the stack (point) and fugitive emissions for ethylene oxide – I see there are no reports for 2017, is site still active?

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.

Chemical Name	Media	Unit Of Measure	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR FUG	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR STACK	Pounds	0	0	0	0	0	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	5
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR FUG	Pounds	508	537	505	517	564	528	518	506	506	460	484	386	303	271	211	211	196	800	890	880	400	250
ETHYLENE OXIDE (TRI Chemical ID: 000075218)	AIR STACK	Pounds	439	466	5256	9565	11798	12540	11903	10979	14933	13562	14275	11371	6816	6481	4816	4833	4479	4520	5100	260	240	250
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR FUG	Pounds	5.6	7	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0
PROPYLENE OXIDE (TRI Chemical ID: 000075569)	AIR STACK	Pounds	5	8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0

If you need in an Excel worksheet vs screen shot, let me know.

Best week's wishes,
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program
Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 8:37 AM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Thank you.

From: Wakeland, Morton
Sent: Friday, July 13, 2018 8:06 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

am just back in Friday – out all week, may have to leave in a few…will try to get to
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program

Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Yurk, Jeffrey
Sent: Thursday, July 12, 2018 12:48 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Mort: Can you help Anupa out with ethylene oxide air emissions from TRI requested below for Sterginics in New Mexico?

Thanks,

Jeff

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 12:44 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: 2014/2016 EtO emissions from Sterginics in NM?

Hi Jeff,
Steve Thompson is asking if the EtO emissions in TRI have been reduced by 83% in 2016 vs 2014. If you send the emissions for those 2 yrs, I can do the calc.

Thank you,
Anupa

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/15/2018 7:24:34 PM
To: Steve Hagle [steve.hagle@tceq.texas.gov]; ramiro.garcia@tceq.texas.gov
Subject: NATA
Attachments: Copy of Ethylene Oxide NATA V2 w 061418 list texas.pdf

Ramiro as we discussed:

It looks like the NATA release is being targeted for the week of 8/27. I apologize for the short notice. Attached are the facilities in Texas that showing more than 100 in 1 million risk at the census tract level.

Facility Name	State	City	Facility Type	V1 MIR @ block (in 1 million)	V2 MIR @ block (in 1 million)	V1 Max Tract Cancer Risk (in 1 million) (from EthOx specific tract file)	Is Census Tract Cancer Risk expected to be > 100 in 1-million in V2?	V1 EtO emissions (tons)	V2 EtO emissions (tons)	Notes on max unit/process and calculation method	Other Changes Btwn V1 and V2?	Applicable MACT (if known)	Type of Source (if known) (HAP Major/Synthetic Minor/Area Source)	Attempts Made at Contact	Notes on current status of facility (If changed since 2014)
PORT NECHES PLANT (Huntsman Corp.)	Texas	PORT NECHES	Chemical Plant	1,416	1,456	229	Yes	11	11	45% of emissions from ethylene oxide, general. Calc method: Stack Test (no Control Efficiency used)		HON, Ethylene (see notes)	Major	May receive information from corporate environmental contact.	
SHELL TECHNOLOGY CENTER HOUSTON	Texas	HOUSTON	Chemical Plant	422	291	195	Yes	0.5	0.5	max process at facility contributes 98% of emissions from unit type Unclassified and process Chemical Manufacturing,Fugitive Emissions,General. calc method: Material Balance		(not HON, MON, OLD, MCM, or Ethylene)	Area Source/True Minor	May receive information from corporate environmental contact.	
Midwest Sterilization Corp	Texas	Laredo	Sterilizer	219	219	117	Yes	8	8	Emissions from TRI (78045MDWST121GE)		O		Trade association has been contacted; expecting data back March 9, 2018.	-- 2016 emissions slightly lower (still over 7 tons)
TEXAS OPERATIONS (Eastman Chemical Co.)	Texas	LONGVIEW	Chemical Plant	1,293	1,355	51	Yes	7	7	47% of emissions are from a cooling tower (process cooling, mechanical draft). Calc method: material balance	not seeing large changes but there are some fugitive emission points with different lengths/widths that were probably treated differently in v1 versus v2	MON, OLD, HON, Ethylene	Major	Received some information from corporate environmental contact, but no changes to emissions. Unsure if we will receive additional information.	

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/2/2018 12:42:03 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Larson, Darrin [Larson.Darrin@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: Recommended Criteria for choosing facilities to focus on for early reductions under NATA

Sorry Steve I was booked pretty solid all afternoon.

From: Thompson, Steve
Sent: Wednesday, August 01, 2018 2:57 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Re: Recommended Criteria for choosing facilities to focus on for early reductions under NATA

Are you free this afternoon?

Have we received the additional requested information from OAQPS?

Ex. 5 Deliberative Process (DP)

LDEQ and TCEQ have both requested a coordinated effort and we need to make sure that OAQPS is aligned with bringing in the states now.

Sent from my iPhone

On Aug 1, 2018, at 7:14 AM, Donaldson, Guy <Donaldson.Guy@epa.gov> wrote:

> Thx,
>
> I haven't heard from Steve.
>
> ---
>
> **From:** Larson, Darrin
> **Sent:** Tuesday, July 31, 2018 5:05 PM
> **To:** Donaldson, Guy <Donaldson.Guy@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
> **Subject:** RE: Recommended Criteria for choosing facilities to focus on for early reductions under NATA
>
> This seems like a reasonable approach to me. Have you and Steve had a chance to talk yet? He'll be on travel Wed. – Fri.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Tuesday, July 31, 2018 11:25 AM
To: Thompson, Steve <thompson.steve@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Recommended Criteria for choosing facilities to focus on for early reductions under NATA

On yesterday's call, we were asked to recommend criteria for prioritizing facilities to work with for early reductions while HQs works on rule revisions.

Based largely on the charts below, I believe we should Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Three facilities would be the focus:

Ex. 5 Deliberative Process (DP)

I see this as having following advantages:

Ex. 5 Deliberative Process (DP)

Please let me know your thoughts because I imagine that enforcement will continue to carry a great deal of the load in investigating these facilities.

<image001.jpg>

<image002.jpg>

Appointment

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/13/2018 5:11:41 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
BCC: R6-ConfRm-RioGrande-11B15/R6---11th-Floor [R6-ConfRm-RioGrande-11B15@epa.gov]

Subject: NATA emissions numbers
Attachments: 2014 NATA Results by Region.pptx
Location: R6-ConfRm-RioGrande-11B15/R6---11th-Floor

Start: 8/13/2018 7:30:00 PM
End: 8/13/2018 8:00:00 PM
Show Time As: Tentative

Required Attendees: Thompson, Steve; Larson, Darrin; Madden, Joshua; Ahuja, Anupa; Parker, Cindy

Just got off an Air Division Director's call and OAQPS is really pressing to make sure the emissions numbers are confirmed because Bill W. wants to release the week of 8/27.

Looked like most folks were available.

I would like to discuss current status and see if we can divide and conquer.

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/8/2018 9:05:36 PM
To: Stenger, Wren [stenger.wren@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: CLOSE HOLD: next steps on EtO facilities

Thx,

Fran is double checking but we think these numbers have already been checked.

From: Stenger, Wren
Sent: Wednesday, August 08, 2018 3:38 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fwd: CLOSE HOLD: next steps on EtO facilities

Wren Stenger, Director
Multimedia Division

Begin forwarded message:

> **From:** "Perez, Idalia" <Perez.Idalia@epa.gov>
> **Date:** August 7, 2018 at 11:26:00 AM CDT
> **To:** "Moraff, Kenneth" <Moraff.Ken@epa.gov>, "Hamjian, Lynne" <Hamjian.Lynne@epa.gov>, "Conroy, David" <Conroy.Dave@epa.gov>, "Filippelli, John" <Filippelli.John@epa.gov>, "Iglesias, Ariel" <Iglesias.Ariel@epa.gov>, "Fernandez, Cristina" <Fernandez.Cristina@epa.gov>, "Arnold, David" <arnold.david@epa.gov>, "Banister, Beverly" <Banister.Beverly@epa.gov>, "Kemker, Carol" <Kemker.Carol@epa.gov>, "Mitchell, Ken" <Mitchell.Ken@epa.gov>, "Nam, Ed" <nam.ed@epa.gov>, "Furey, Eileen" <furey.eileen@epa.gov>, "Stenger, Wren" <stenger.wren@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>, "Smith, Mark A." <Smith.Marka@epa.gov>, "Smith, John" <Smith.John@epa.gov>, "Hestmark, Martin" <Hestmark.Martin@epa.gov>, "Daly, Carl" <Daly.Carl@epa.gov>, "Morales, Monica" <Morales.Monica@epa.gov>, "Wood, MelanieL" <Wood.MelanieL@epa.gov>, "Adams, Elizabeth" <Adams.Elizabeth@epa.gov>, "Lakin, Matt" <Lakin.Matthew@epa.gov>, "Hamlin, Tim" <Hamlin.Tim@epa.gov>, "Hastings, Janis" <Hastings.Janis@epa.gov>
> **Cc:** "Koerber, Mike" <Koerber.Mike@epa.gov>
> **Subject: CLOSE HOLD: next steps on EtO facilities**
>
> ADDs,
> Attached are two documents. Both are **close hold**, please do not share.
> 1. Draft list of facilities for discussion on Wednesday's special purpose call.
>
> 2. ATSDR letter mentioned by Region 5 on the last EtO call. Below some contextual information:
> In June, after conducting modeling and monitoring around an ethylene oxide source (Sterigenics) in the suburbs of Chicago, Region 5 requested that ATSDR review the results and specifically answer the question: If modeled and measured EtO concentrations represent long-term conditions, would they pose a public health problem for people living and working in Willowbrook?

ATSDR's assessment of that question is provided in the attached letter consult. Please keep it close hold. Note their findings and recommendations are specific to the Sterigenics facility in Willowbrook, Illinois.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/15/2018 7:36:32 PM
To: Vivian Aucoin [Vivian.Aucoin@LA.GOV]; Kelly.Petersen@LA.gov
Subject: FYI this is the list we handed to Secretary Brown
Attachments: Ethylene Oxide NATA V2 w 061418 list corrected with Sasol _LA only.xlsx

The release is currently projected for week of August 27

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/15/2018 7:41:34 PM
To: Kelly Petersen [Kelly.Petersen@LA.GOV]
CC: Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; vivian.aucoin@la.gov [Vivian.Aucoin@LA.GOV]; Ahuja, Anupa [ahuja.anupa@epa.gov]
Subject: RE: 2014 NATA emission numbers for Taminco, Sasol

Thanks Kelly.

I have put a call into Randy Riddick.

From: Kelly Petersen [mailto:Kelly.Petersen@LA.GOV]
Sent: Wednesday, August 15, 2018 1:48 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; vivian.aucoin@la.gov
Subject: RE: 2014 NATA emission numbers for Taminco, Sasol

There have been no revisions to the 2014 EI data for the following facilities that were not included in the EIS upload of data in 2015. I have included the name and email address of the contact that submitted the inventory as well as the facility contact, where it is different.

Union Carbide – 2083
Submitted by: Bret DeJean dejeanbm@dow.com
EI Contact: Randy Riddick rriddick@dow.com (985) 783-4978

Air Products – 13560
Jason Walker jason.walker@evonik.com (985) 536-9133

Taminco, USA – 3263
Submitted by: Ivan Williams ivanwilliams@eastman.com
EI Contact: Chris M Markerson (225) 642-4226

Sasol Chemicals – 3271
Scott Shaw scott.shaw@us.sasol.com (337) 494-5058

Kelly Petersen
Air Planning and Assessment Division
Louisiana Department of Environmental Quality
Phone: (225) 219-3397 Fax: (225) 325-8141 kelly.petersen@la.gov

From: Parker, Cindy <parker.cindy@epa.gov>
Sent: Tuesday, August 14, 2018 9:45 AM
To: Kelly Petersen <Kelly.Petersen@LA.GOV>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: 2014 NATA emission numbers for Taminco, Sasol

Sorry – left one off the list –
We also need to confirm for Air Products, in Reserve, 2014 ethylene oxide emissions of 1.6 tons.

Sorry for the omission,
Thanks,
Cindy

From: Parker, Cindy
Sent: Tuesday, August 14, 2018 9:35 AM
To: Kelly.Petersen@LA.gov
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: 2014 NATA emission numbers for Taminco, Sasol

Hi, Kelly,

We are finalizing our NATA assessment and need to verify 2014 ethylene oxide emission numbers for two Louisiana facilities.

Taminco, USA, Inc, St Gabriel, Iberville Parish, emissions of 1.1 tons

Sasol Chemicals, LLC, Westlake, Calcasieu Parish, emissions of 6.3 tons.

Can you please confirm these numbers with both of these facilities? We need responses by COB today. If you are not able to do this, can you please forward your contact information for these two facilities so that we can call?

Thank you,

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/13/2018 7:42:03 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: Fwd: 2014 NATA Short Term actions and facilities list
Attachments: Facility checklist_Aug13 Final.edit.xlsx; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

From: "Stenger, Wren" <stenger.wren@epa.gov>
Date: August 13, 2018 at 1:12:25 PM CDT
To: "Gray, David" <gray.david@epa.gov>, "Seager, Cheryl" <Seager.Cheryl@epa.gov>
Cc: "Thompson, Steve" <thompson.steve@epa.gov>, "Donaldson, Guy" <Donaldson.Guy@epa.gov>, "Verhalen, Frances" <verhalen.frances@epa.gov>, "Parker, Cindy" <parker.cindy@epa.gov>, "Price, Lisa" <Price.Lisa@epa.gov>
Subject: FW: 2014 NATA Short Term actions and facilities list

The revised short term action facilities list, minus the Reserve Plant.

From: Koerber, Mike
Sent: Monday, August 13, 2018 1:00 PM
To: Stenger, Wren <stenger.wren@epa.gov>
Cc: Perez, Idalia <Perez.Idalia@epa.gov>
Subject: Fwd: 2014 NATA Short Term actions and facilities list

Wren - Here is the revised list.

From: "Stenger, Wren" <stenger.wren@epa.gov>
Date: August 13, 2018 at 1:15:43 PM EDT
To: "Koerber, Mike" <Koerber.Mike@epa.gov>, "Sasser, Erika" <Sasser.Erika@epa.gov>, "Lassiter, Penny" <Lassiter.Penny@epa.gov>
Cc: "Stenger, Wren" <stenger.wren@epa.gov>
Subject: 2014 NATA Short Term actions and facilities list

Mike, all,

After hearing the criteria of 1000 in 1M risk for ethylene oxide for the targeted short term action, R6 requests that you remove Air Products Performance

Manufacturing Inc—Reserve Plant, LA from the facilities' short-term action list. We can pull it in functionally after 2014 NATA is released, but prefer it is not included on the list. I discussed this with the R6 DRA, and he agrees.

WREN STENGER

DIRECTOR, MULTIMEDIA DIVISION

EPA REGION 6 DALLAS, TEXAS

214.665.6583

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/16/2018 7:08:45 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: R5 Sterigenics facility

Thank you

From: Larson, Darrin
Sent: Thursday, August 16, 2018 11:04 AM
To: Thompson, Steve <thompson.steve@epa.gov>
Cc: Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: R5 Sterigenics facility

Dr. Brown asked for more info. on the Sterigenics facility (in particular, steps EPA or IEPA may be taking to control emissions). This is the only information I have, but I'm not sure how much can be shared.

I put in a call to Sara Breneman and Margaret Sieffert in R5 to see what the current status is, and I'll let you know when I hear back.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Verhalen, Frances
Sent: Thursday, June 21, 2018 4:08 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: Draft Sterigenics news release

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Gray, David
Sent: Thursday, June 21, 2018 1:45 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: Draft Sterigenics news release

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Jeff Kelley
Director, Office of External Communications
U.S. EPA Region 5
ph: 312-353-1159

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 7/23/2018 9:27:05 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: FW: (close hold) Special Purpose Call: Ethylene Oxide Potential Health Risks/NATA Results
Attachments: (close hold) Special Purpose Call: Ethylene Oxide Potential Health Risks/NATA Results

FYI

Appointment

From: Perez, Idalia [Perez.Idalia@epa.gov]
Sent: 7/23/2018 9:07:41 PM
To: Adams, Elizabeth [Adams.Elizabeth@epa.gov]; Arnold, David [arnold.david@epa.gov]; Banister, Beverly [Banister.Beverly@epa.gov]; Bray, Dave [Bray.Dave@epa.gov]; Conroy, David [Conroy.Dave@epa.gov]; Daly, Carl [Daly.Carl@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Fernandez, Cristina [Fernandez.Cristina@epa.gov]; Filippelli, John [Filippelli.John@epa.gov]; Hamjian, Lynne [Hamjian.Lynne@epa.gov]; Hamlin, Tim [Hamlin.Tim@epa.gov]; Hastings, Janis [Hastings.Janis@epa.gov]; Hestmark, Martin [Hestmark.Martin@epa.gov]; Iglesias, Ariel [Iglesias.Ariel@epa.gov]; Jay, Michael [Jay.Michael@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]; Kemker, Carol [Kemker.Carol@epa.gov]; Koerber, Mike [Koerber.Mike@epa.gov]; Kornylak, Vera S. [Kornylak.Vera@epa.gov]; Lakin, Matt [Lakin.Matthew@epa.gov]; Lewis, Josh [Lewis.Josh@epa.gov]; Mathias, Scott [Mathias.Scott@epa.gov]; Mooney, John [Mooney.John@epa.gov]; Moraff, Kenneth [Moraff.Ken@epa.gov]; Morales, Monica [Morales.Monica@epa.gov]; Nam, Ed [nam.ed@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Smith, John [Smith.John@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]; Tsirigotis, Peter [Tsirigotis.Peter@epa.gov]; Wayland, Richard [Wayland.Richard@epa.gov]; Weber, Rebecca [Weber.Rebecca@epa.gov]; Whitlow, Jeff [Whitlow.Jeff@epa.gov]; Wood, Anna [Wood.Anna@epa.gov]; Wood, MelanieL [Wood.MelanieL@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Truesdell, Raymond [truesdell.raymond@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Cozzie, David [Cozzie.David@epa.gov]; Davis, Alison [Davis.Alison@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]; Riha, Kristin [Riha.Kristin@epa.gov]; Rodman, Sonja [Rodman.Sonja@epa.gov]; Anderson, Lea [anderson.lea@epa.gov]; Sasser, Erika [Sasser.Erika@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Bradley, Megan [Bradley.Megan@epa.gov]

Subject: (close hold) Special Purpose Call: Ethylene Oxide Potential Health Risks/NATA Results
Attachments: 2014 NATA Results Summary_Special Purpose Call.pptx; 2014 NATA Results by Region.pptx
Location: Line 866-299-3188 code: 707-6865#

Start: 7/24/2018 7:00:00 PM
End: 7/24/2018 8:00:00 PM
Show Time As: Tentative

Required Attendees: Adams, Elizabeth; Arnold, David; Banister, Beverly; Bray, Dave; Conroy, David; Daly, Carl; Donaldson, Guy; Fernandez, Cristina; Filippelli, John; Hamjian, Lynne; Hamlin, Tim; Hastings, Janis; Hestmark, Martin; Iglesias, Ariel; Jay, Michael; Jones, Rhea; Kemker, Carol; Koerber, Mike; Kornylak, Vera S.; Lakin, Matt; Lewis, Josh; Mathias, Scott; Mooney, John; Moraff, Kenneth; Morales, Monica; Nam, Ed; Price, Lisa; Smith, John; Stenger, Wren; Tsirigotis, Peter; Wayland, Richard; Weber, Rebecca; Whitlow, Jeff; Wood, Anna; Wood, MelanieL; Langdon, Robin; Smith, Darcie; Truesdell, Raymond; Palma, Ted; Caparoso, Jennifer; Strum, Madeleine; Cozzie, David; Davis, Alison; Bremer, Kristen; Riha, Kristin; Rodman, Sonja; Anderson, Lea; Sasser, Erika
Optional Attendees: Verhalen, Frances; Bradley, Megan

Update: Adding materials.
Confirming the correct 3ET/12PT call.

Purpose: To discuss potential EtO health risks identified through NATA results, and next steps in the NATA process.

National Air Toxics Assessment (NATA): 2014 Results Summary

Special Purpose Call for Air Division Directors

July 24, 2018

Key Messages

- NATA is a screening tool that identifies areas for further analysis
  - It does not single out one area of the country as having the highest risks
  - It uses estimates of emissions and computer models to approximate risks; it is not designed to determine actual health risks to individual people

Ex. 5 Deliberative Process (DP)

- Nationwide, emissions of air toxics are decreasing, but local areas still face challenges

NATA Approach

- Screening-level characterization of air toxics across the nation
  - Nationwide assessment with census-**tract** resolution (about 74,000 tracts)
  - Based on air quality modeling of emissions from stationary, mobile, biogenic sources, and fires using the National Emissions Inventory (NEI)
  - Ambient and exposure concentration estimates for 175 HAP plus diesel particulate matter (DPM)
  - Cancer and noncancer risk estimates for about 140 Clean Air Act hazardous air pollutants (HAP) with health data based on chronic exposures
- This is the 6th NATA (2014 NATA)
  - Previous assessments for inventory years 1996, 1999, 2002, 2005, 2011
- Primary NATA Uses
  - Planning tool for EPA, state/local/tribal organizations
    - To identify locations of interest for further study
    - To prioritize pollutants and emission sources/types
    - To inform monitoring programs
  - Serve partner needs by developing innovative data and communication tools

Limitations

- Emissions, modeled ambient concentrations, and estimated inhalation exposures are only from outdoor sources via the inhalation route of exposure
- Results are more uncertain at finer geographic scales
  - Surrogates used to allocate mobile and nonpoint source emissions
- Results should not be used to compare risks among different areas of the country
  - Underlying emissions data vary in level of detail from state to state
- Results should not be compared between NATAs
  - Changes in results are due to actual emission changes as well as the use of different modeling and emissions processing techniques. In addition, other assessment inputs, such as meteorological data and health benchmark values, change over time.

2014 NATA Analytical Steps

Compile National Emissions Inventory (2014 NEI)

2014 NEI includes stationary, mobile and natural sources (fires, biogenics).

NATA includes 175 HAP and diesel particulate from mobile sources.

Estimate ambient concentrations of air toxics across the U.S.

Uses CMAQ and AERMOD to predict census-tract ambient concentrations nationwide.

Estimate population exposures

Includes an exposure model (HAPEM7) to account for human activity data, commuting patterns, and near-roadway exposures.

Characterize potential public health risks from inhalation

Census-tract level cancer and noncancer risks nationwide.

Improvements & Updates for 2014

- Inventory:
  - ***Updated spatial allocation for mobile and nonpoint sources***
  - NEI improved in many areas: e.g., oil & gas, onroad, nonroad, commercial marine vessels
  - Areas outside CMAQ domain (AK, HI, PR, VI) better characterized for AERMOD modeling
  - New emissions processing tool built for preparing AERMOD emissions
- Photochemical/Dispersion Modeling:
  - In CMAQ: improved boundary conditions and carbon tetrachloride treatment; nine more HAP modeled than for 2011 NATA
  - More spatially refined meteorology using prognostic meteorological modeling (WRF)
- Exposure Modeling:
  - New features of HAPEM 7, including updated population and commuting patterns, activity pattern data, and four additional commuting-related microenvironments
- Risk Characterization:
  - ***Updated health benchmarks – ethylene oxide, acrolein, benzo(a)pyrene***
- Outreach:
  - Updated Map App features
  - Potential story map

Pre-Release Results

Do not cite, quote or release

The NATA team is still performing QA/QC
of the data prior to public release

Ex. 5 Deliberative Process (DP)

MSAs with Elevated Cancer Risks

2014 NATA Version 2

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ethylene Oxide Risks

Ex. 5 Deliberative Process (DP)

- Data review activities:
  - OAQPS contacted trade associations and facilities
  - Regional staff also contacted states and facilities
  - Any revised data received to date has been incorporated into NATA or evaluated for appropriateness for inclusion

Facilities by Region w/Elevated Risks

2014 NATA Version 2

See separate file *2014 NATA Results by Region* for tables of facilities by region

Moving Forward

- Planned Release: Mid-August 2018
- Steps Before Release*:
  - July -- briefings for Office Directors, AAs, and Regions
  - July 9 (week of) – share NATA results with regions
  - July 16 (week of) – webinar with regions, outreach to specific states or facilities
  - July 23 (week of) – webinar with states, including Q&A session
  - Early August -- share results with state/local/tribal agencies for 2-week preview period

**These dates could change if new data is identified during the review. The timing of the state review is also flexible depending on what is needed for each state regarding EtO communications and outreach.*

Communications and Outreach

- HQ plans to prepare general materials on NATA and ethylene oxide, including:
  - Q & As
  - Talking points
  - Fact sheet(s)
- We stand ready to support the regions (and their states) by developing materials specific to your states/localities, including:
  - Regional talking points
  - Draft press releases
  - Other targeted materials as needed

Appendix

Results, Outreach, and Documentation

- Tabular results by pollutant and source type:
  - Emissions (facility, grid, county level)
  - Ex. 5 Deliberative Process (DP)
  - Generally used by researchers, data-savvy users
- Visual display of tabular results in interactive Map App
  - Can help users identify the sources and pollutants that contribute to potential risks in their community
  - Available on tablets and smartphones
  - Often used by the press
- Webpages with methods, results, FAQs and other references
- Technical support document and related documentation

State/Local/Tribal Outreach & Engagement

- NATA is developed with our regional and state/local/tribal partners, from NEI development through to NATA release, over multiple years

Ex. 5 Deliberative Process (DP)

Source Attribution –Concentrations/Risks by 38 Groups

ONROAD
Light duty gas on-network
Light duty diesel on-network
Refueling
Light duty gas off network
Light duty diesel off network
Heavy duty gas on-network
Heavy duty diesel on-network
Heavy duty gas off network
Heavy duty diesel off network
Heavy duty diesel hoteling

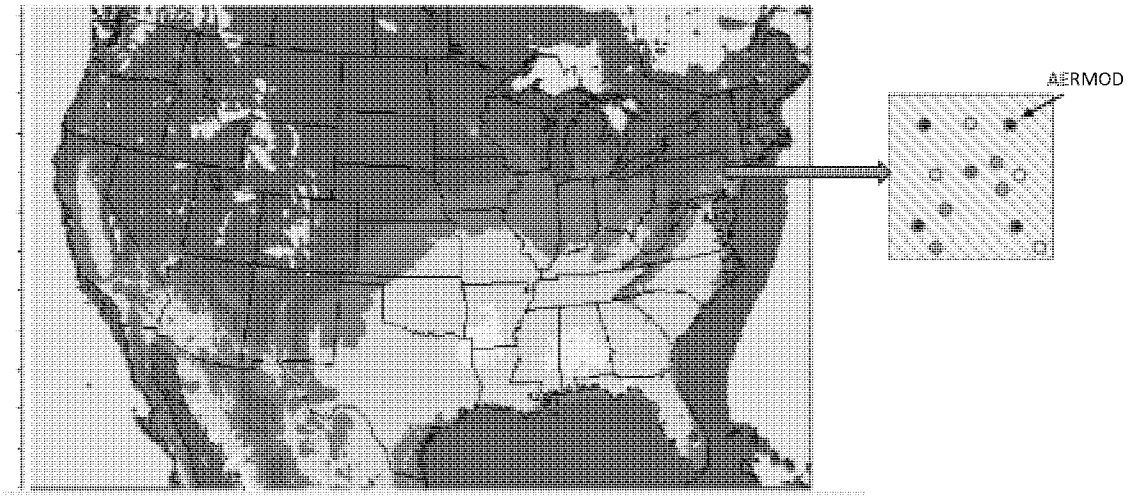
NONROAD
Recreational-inc. pleasure craft
Construction
Commercial Lawn & Garden
Residential lawn & Garden
Agricultural Equipment
Commercial Equipment
All Other Nonroad Equipment
Commercial Marine Vessels Ports C1/C2
Commercial Marine Vessels Ports C3
Commercial Marine Vessels Underway
Locomotives
Airports (point)
Railyards (point)

NONPOINT STATIONARY
Oil & Gas
Residential Wood Combustion
Miscellaneous Nonindustrial
Commercial Cooking
Solvents and Coatings
Storage and Transfer, Bulk Terminals, Stage1
Fuel Combustion except residential wood
Industrial
Waste Disposal
Agricultural livestock

POINT
Stationary point

OTHER
Fires -primary*
Biogenics - primary *
secondary formation [includes all sources]
Background
[illegible]

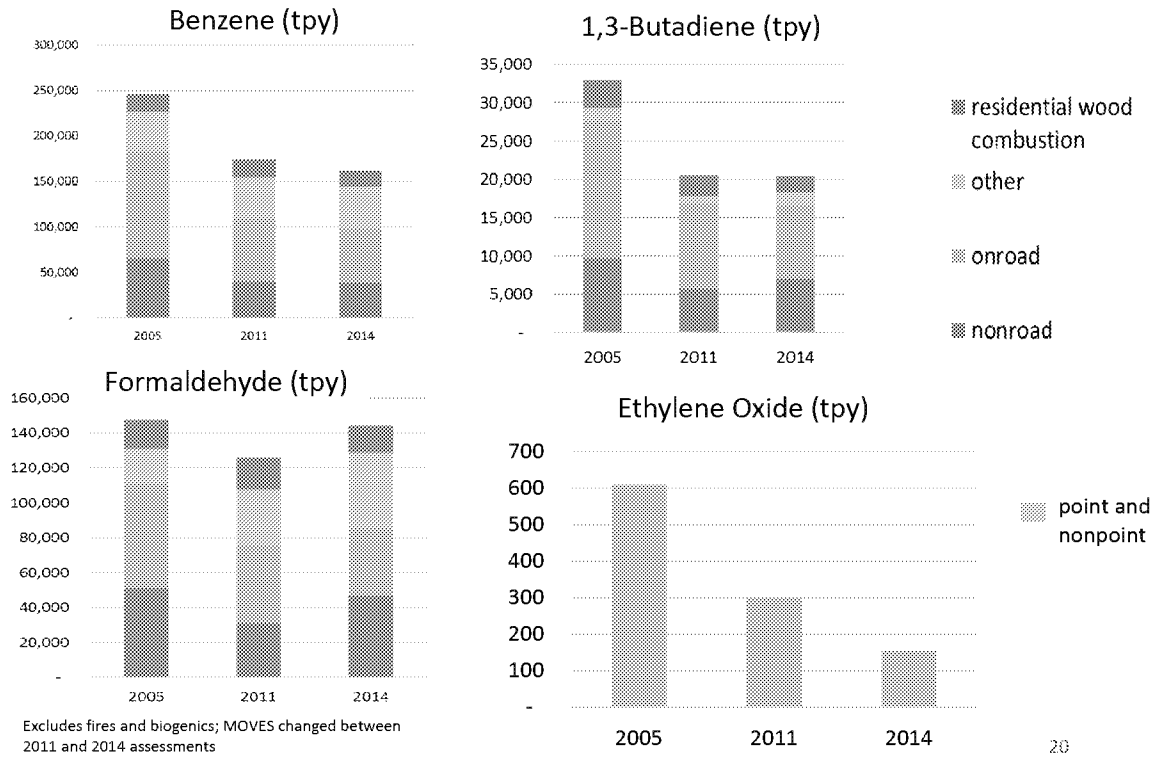
Hybrid Approach -
Combines CMAQ and AERMOD in each grid cell



consistent MET and emissions across CMAQ and AERMOD

Emissions trends show decrease

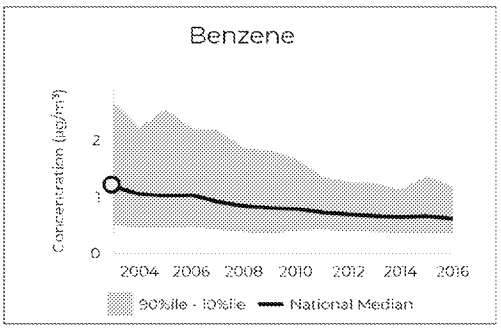
2014 NATA Version 2



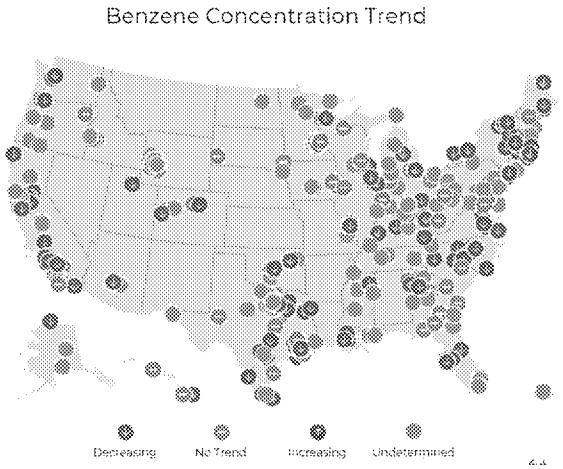
Excludes fires and biogenics; MOVES changed between 2011 and 2014 assessments

Monitoring data shows similar trends

2014 NATA Version 2



Benzene Monitors – 2003 to 2016
E-trends Report



National Cancer Risk Results

- Population-weighted, national-average cancer risk estimated to be **30-in-1 million**
- Ex. 5 Deliberative Process (DP)
- Ex. 5 Deliberative Process (DP)
- Ex. 5 Deliberative Process (DP)
- Ex. 5 Deliberative Process (DP)

2011 NATA Results

- National-average cancer risk: 40-in-1 million
- Ex. 5 Deliberative Process (DP)
- Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

National Average Cancer Risk

2014 NATA Version 2

Pollutant Contributions (30-in-1 million)

Ex. 5 Deliberative Process (DP)

National Average Cancer Risk

2014 NATA Version 2

Source Contributions (30-in-1 million)

Ex. 5 Deliberative Process (DP)

National Noncancer Risks

- Respiratory
  - National noncancer (respiratory) Hazard Index (HI) is estimated to be 0.4
    - HI is the sum of hazard quotients for individual pollutants
    - RfC > 1 indicates potential for noncancer health effects

Ex. 5 Deliberative Process (DP)

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/16/2018 9:02:20 PM
To: Taheri, Diane [Taheri.Diane@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: Note that will be on NATA website for New Mexico

New Mexico: STERIGENICS-SANTA TERESA FACILITY (EIS ID 7582111) in Santa Teresa, NM, Dona Ana County, installed a control device and has reduced EtO emissions by 83% between 2014 and 2016.

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/21/2018 1:40:26 PM
To: Parker, Cindy [parker.cindy@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
CC: Smith, Darcie [Smith.Darcie@epa.gov]
Subject: RE: ERRATA Change: can we have a pow-wow about NMED, pls?

Building on Fran's talking points, how about these for NMED

- The NATA map highlights any metropolitan statistical area (MSA) that has a census tract where risks are estimated to be elevated.
- This does not mean the risks are elevated throughout the MSA.
- The elevated risk associated with the Las Cruces MSA results from elevated risk for a single Census tract in the Santa Teresa area.
- This Census tract contains a source of ethylene oxide, Sterigenics.
- While the NATA estimates do not have sufficient resolution to estimate the risk on a smaller than Census block scale, we note that the facility is not in close proximity to residential areas.
- importantly the Sterigenics facility has put in pollution control equipment that have reduced its emissions by 83% since the 2014 NATA estimate which is expected to address the elevated risk.

From: Parker, Cindy
Sent: Tuesday, August 21, 2018 8:09 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: ERRATA Change: can we have a pow-wow about NMED, pls?

When I spoke with Liz Kuehn yesterday, she wanted to know why she had an EPA email (from Josh and I) that Sterigenics wasn't a concern – it was not at the time, it's an old email – and then suddenly the second largest city in the state pops red, and the Sterigenics facility is 30 mi away. She questioned the MSA, and including Las Cruces in the Sterigenics area, meaning that the population of Las Cruces was at risk. And we had told her not to worry about Sterigenics. She had already spoken to Fran when she called me. I sent her to Darcie.
I don't know that we can change the MSA designation, but maybe some talking points to help them out?

From: Verhalen, Frances
Sent: Tuesday, August 21, 2018 8:01 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: ERRATA Change: can we have a pow-wow about NMED, pls?

- NATA map is located at the metropolitan statistical area (MSA) locale. Thus a facility in Santa Teresa is associated with the Las Cruces MSA.
- The assessment is for a specific area within the MSA. In this case, the elevated risk is associated with a facility in Santa Teresa.
- The facility in Santa Teresa shows modeled risk for residents to the west at approximately 1 mile. There may be a school in this area.
- EPA has added a notation to the MAP APP for Santa Teresa that indicates that the emissions are based on information from the 2014 EI or TRI and that these emissions have changed after the 2014 EI or TRI was submitted.

Frances Verhalen, P.E., Chief

Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Verhalen, Frances
Sent: Tuesday, August 21, 2018 8:01 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: can we have a pow-wow about NMED, pls?

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Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Donaldson, Guy
Sent: Monday, August 20, 2018 4:14 PM
To: Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: can we have a pow-wow about NMED, pls?

I'm not sure what else we can share at this point that we haven't already.

From: Parker, Cindy
Sent: Monday, August 20, 2018 3:29 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: can we have a pow-wow about NMED, pls?

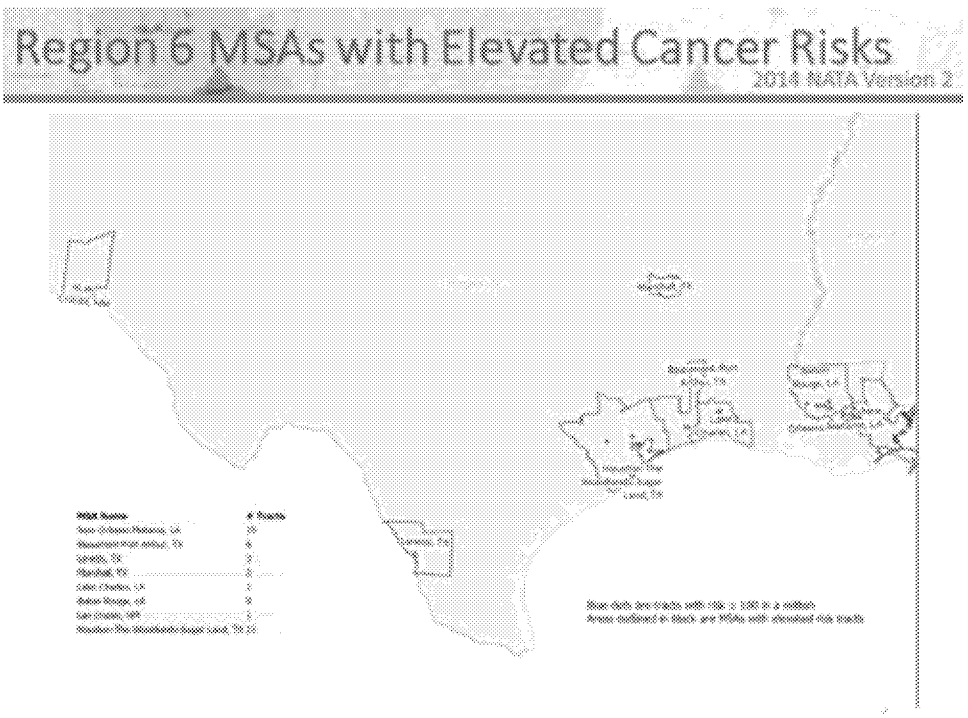
I think we need to offer more details and explanations about the latter part of the process, what to expect, etc. So far today, I have talked with both Roslyn and Liz Kuehn, and they are both still seeking more information.

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Donaldson, Guy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D2A0969773664CC3B6EB1208748F1A5D-DONALDSON, GUY]
Sent: 8/17/2018 7:09:00 PM
To: Taheri, Diane [Taheri.Diane@epa.gov]
Subject: RE: NATA DATA Site Locator Map
Attachments: 2014 NATA Results Dr Brown 081418 (005).pptx

I thought you were trying for more localized maps. We have the map below which shows the census tracts.



From: Taheri, Diane
Sent: Friday, August 17, 2018 11:02 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: FW: NATA DATA Site Locator Map

Thoughts? Is this helpful?

Diane

Message

From: Gray, David [gray.david@epa.gov]
Sent: 8/14/2018 11:03:49 AM
To: Idsal, Anne [idsal.anne@epa.gov]; Lindley, Emily [lindley.emily@epa.gov]; Chancellor, Erin [chancellor.erin@epa.gov]
Subject: NATA
Attachments: Facility checklist_Aug13 Final.edit.xlsx; ATT00001.txt

NATA facilities identified for parallel path efforts for ethylene oxide. We are confirming emission reports with facilities and coordinating with states.

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 4/13/2018 7:44:16 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
CC: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: Specific facility information - 2nd email on 3 NATA facilities
Attachments: EtO facilities permit limits and links.xlsx

Here is the facility-specific information Nevine researched for us.

Cindy

From: Salem, Nevine
Sent: Friday, April 13, 2018 10:43 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Specific facility information

Josh/Cindy:

Below are the Envirofacts link and contacts for each facility copied. I hope this is what you are looking for. Please let me know.

I am also attaching the excel spreadsheet that I had from last year. It has the ECHO link for each facility (column L). You can get facility contacts by clicking on FRS hyperlink in the ECHO report it will direct you to Envirofacts where you can find the contacts info in the bottom right corner.

1. **Air Products Performance Manufacturing, Reserve, LA, facility EIS ID # 5287111**

Envirofacts Link:
https://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110017758381

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
REGULATORY CONTACT	JASON WALKER	985-536-9133	RCRAINFO	
PUBLIC CONTACT	LISA ANN CICH	610-481-0561	TRIS	
REGULATORY CONTACT	WILLIAM ROSENZWEIG	9855369125	RCRAINFO	
REGULATORY CONTACT	JAMES M JOUBERT	9855369114	RCRAINFO	
PUBLIC CONTACT	BILL ROSENZWEIG	9855369125	TRIS	

2. **BCP Ingredients (Balchem Co. is the parent company) facility EIS ID# 7451011**

Envirofacts link and contacts (looks like a general # for all contacts).

https://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110000597417

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
TECHNICAL CONTACT	MR. DANISH YAZDANI		TSCA	
RESPONSIBLE PARTY	JED BISHOP	2252554889	RMP	
PUBLIC CONTACT	WILLIAM RITTER	2252554889	TRIS	
REGULATORY CONTACT	GARY M OBANNON	2252554889	RCRAINFO	
PUBLIC CONTACT	JED BISHOP	2252554889	TRIS	
TECHNICAL CONTACT	JED BISHOP	2252554889	TRIS	

3. **Akzo Nobel Surface Chemical, LLC, Houston Plant, EIS facility ID# 4853011**

Envirofacts link:
https://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110000461884

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
UNKNOWN CONTACT	MR. TERRY HIGHT	7134344430	AIRS/AFS	
COMPLIANCE CONTACT	MR. TERRY HIGHT	7134344430	AIRS/AFS	
OWNER	ANDREW J WOODS	6104299502	TX-TCEQ ACR	
OWNER	SUSAN FEESER	4234939344	SSTS	
PUBLIC CONTACT	JOHN HOFFMAN	7134344479	TRIS	
PUBLIC CONTACT	JOS CLAESSEN	7134344479	TRIS	
TECHNICAL CONTACT	MR. JON STALEY		TSCA	
COMPLIANCE CONTACT	MR. TERRY HIGHT	7134344430	AIR	
UNKNOWN CONTACT	MR. TERRY HIGHT	7134344430	AIR	
TECHNICAL CONTACT	SERGIO SEPULVEDA	713-434-4430	TRIS	
COMPANY OFFICIAL	NICK STAPEL	3125447004	SSTS	
COMPANY OFFICIAL	SUSAN FEESER	3129426200	SSTS	

Nevine Salem
Environmental Engineer
Ozone & Infrastructure Section (6MM-AB)
U.S. EPA, Region 6

1445 Ross Avenue
Dallas, Texas 75202
(214)-665-7222

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From: Parker, Cindy
Sent: Friday, April 13, 2018 9:58 AM
To: Salem, Nevine <Salem.Nevine@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Specific facility information

I am not exactly sure where in the process this number is assigned, or by whom. I know it is specific to the facility, but not necessarily specific to an address. We've used it to be sure we are looking at the info for the specific facility we're researching.
I'm not sure if it is assigned before being included in the NEI, or when?
Short answer, I don't know. I can ask around, tho -

From: Salem, Nevine
Sent: Friday, April 13, 2018 9:49 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Specific facility information

What is the facility ID#? Is it the NEI/EIS #?

From: Parker, Cindy
Sent: Friday, April 13, 2018 9:44 AM
To: Salem, Nevine <Salem.Nevine@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Specific facility information

Thank you, Nevine.

Here's the 3 we're working on:

Air Products Performance Manufacturing, Reserve, LA, facility ID # 5287111

BCP Ingredients (Balchem Co. is the parent company, we think), facility ID# 7451011

Akzo Nobel Surface Chemical, LLC, Houston Plant, facility ID# 4853011

Josh – anything to add?

From: Salem, Nevine
Sent: Friday, April 13, 2018 9:36 AM
To: Parker, Cindy <parker.cindy@epa.gov>

Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Specific facility information

I can try Cindy. Send me the facilities names and I will see what I can do.

Nevine Salem
Environmental Engineer
Ozone & Infrastructure Section (6MM-AB)
U.S. EPA, Region 6
1445 Ross Avenue
Dallas, Texas 75202
(214)-665-7222

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From: Parker, Cindy
Sent: Friday, April 13, 2018 9:34 AM
To: Salem, Nevine <Salem.Nevine@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: Specific facility information

Hi, Nevine,
We are searching for facility-specific information on 3 facilities on our NATA list. We will need to phone them about their emission numbers, so we are searching for the name of the facility health & safety supervisor at each facility.
Josh searched through ECHO yesterday looking for a name, and couldn't find it.
It's only 3 facilities, but this effort has created so much drama for us, you wouldn't believe it.

Is this something you could help us find in ECHO, or show us where to find it?

Thank you,

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 6/6/2018 6:47:37 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

Darrin said he had heard that TCEQ submitted comments when our IRIS changes for EtO were going through the public participation process. So Fran is tracking it down.
That's all. And I expect it will end there, as its pretty clear none of the comments came from TCEQ or any of our state agencies. Don't sweat it.

From: Madden, Joshua
Sent: Wednesday, June 06, 2018 1:40 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

I'm not sure I understand what the purpose of this is for us? Am I missing something? It doesn't look like anyone made any comments for the time frame that concerns us. Right?

From: Parker, Cindy
Sent: Wednesday, June 06, 2018 1:02 PM
To: Madden, Joshua <madden.joshua@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: Ethylene Oxide comments from R6 states during IRIS comment period

Fran, do you recognize any names? I saw Sterigenics, our NM facility. Would be interesting to see what kind of comments TCEQ received, and from whom.

From: Soto, Vicki
Sent: Wednesday, June 06, 2018 11:34 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Vandenberg, John <Vandenberg.John@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

Hi – This may make it easier to go through the docket content. You can sort/filter on the public submissions. Unfortunately it doesn't include the actual attachments – you need to get those from the docket.

Thanks – let me know if you have problems or need any other content.

Vicki

From: Verhalen, Frances
Sent: Wednesday, June 06, 2018 8:45 AM
To: Vandenberg, John <Vandenberg.John@epa.gov>; Soto, Vicki <Soto.Vicki@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

Thank you, both.
John, as always, I appreciate your responsiveness.
Vicki, I appreciate the docket number; it makes it easier to search. We will research what we need.

Again, many thanks for the prompt assistance.
Fran

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Vandenberg, John
Sent: Wednesday, June 06, 2018 6:58 AM
To: Soto, Vicki <Soto.Vicki@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

Vicki - Thank you!
Fran - hope this provides access to the public comments.
John

From: Soto, Vicki
Sent: Wednesday, June 06, 2018 7:36 AM
To: Vandenberg, John <Vandenberg.John@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

Hi – apologies for the delayed response, I was out of the office yesterday.

All comments from states would have been put into the EtO Docket on regulations.gov. You can view all of the public comments on regulations.gov by searching for the EtO docket EPA-HQ-ORD-2006-0756. It looks like there were 51 public comments.

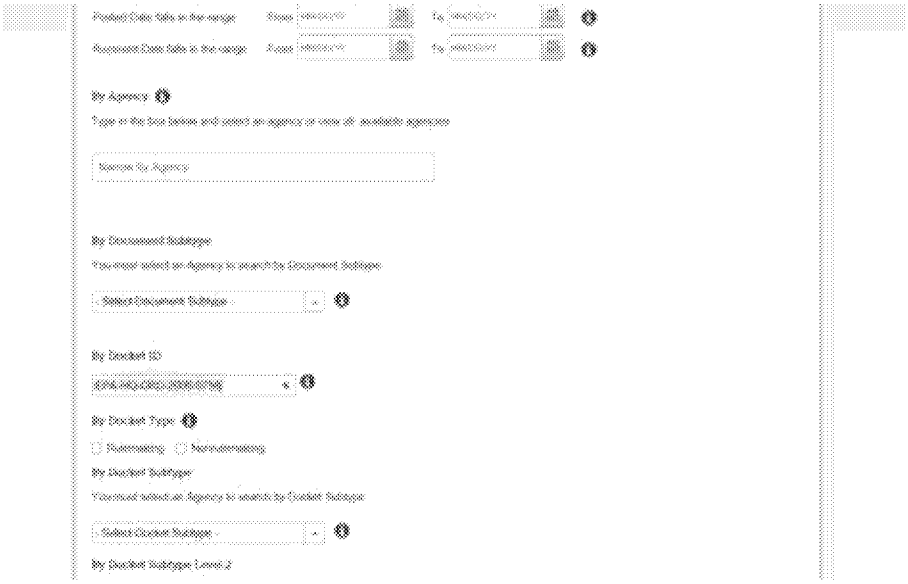
- Use the advance search and search by Docket Id (see below)
- From the results list – click on "Open Docket Folder" (see below)
- Scroll down to see the comments – some comments have attachments that are viewable

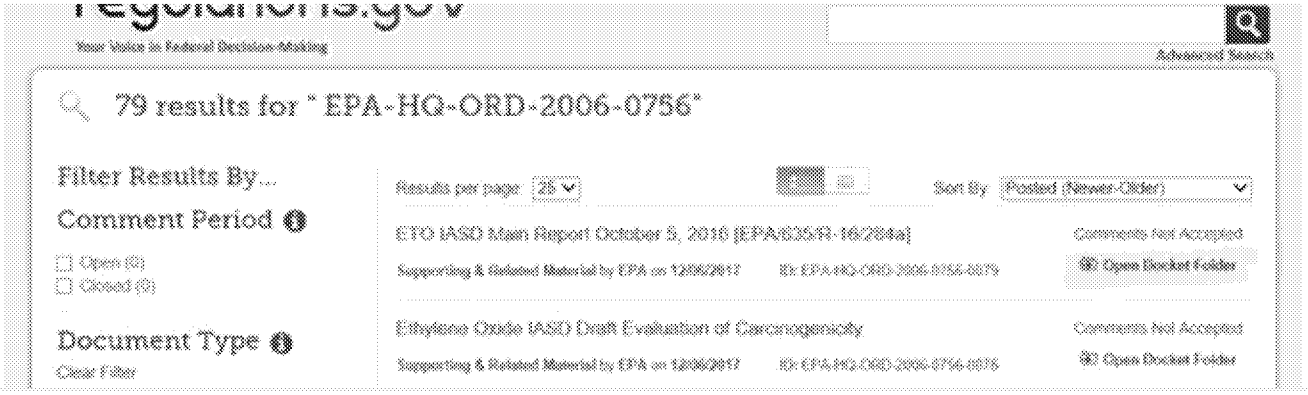
I should be able to download the metadata from the docket from the internal database fdms.gov. It looks like my password is currently invalid – I will try to get it straightened out today and will do my best to send you the list in a spreadsheet.

Feel free to reach out if you have questions.

Vicki

Vicki Soto | 202-564-3077 | soto.vicki@epa.gov
ORD/NCEA/IRISD





From: Vandenberg, John
Sent: Monday, June 04, 2018 4:13 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Soto, Vicki <Soto.Vicki@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Ethylene Oxide comments from R6 states during IRIS comment period

Hi Fran,
I don't know but I'm copying Vicki Soto who will know who to ask.
John

From: Verhalen, Frances
Sent: Monday, June 04, 2018 4:03 PM
To: Vandenberg, John <Vandenberg.John@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: Ethylene Oxide comments from R6 states during IRIS comment period

John,
Do you know if any of the Region 6 states (AR, LA, NM, OK, or TX) submitted any comments during the ethylene oxide IRIS comment period? TCEQ asked for comments about toxicity data regarding ethylene oxide for their use last November.

Thank you, Fran

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 10/13/2017 7:39:42 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: NATA reviews

From: Verhalen, Frances
Sent: Wednesday, April 05, 2017 1:20 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: RE: NATA reviews

Darcie,
In looking at the numbers, it does not appear that there is a linear connection between the September and December cancer risk calculations – and there should be, if the only adjustment was the risk factor (x56). I am confused. Can you explain?

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Smith, Darcie
Sent: Wednesday, April 05, 2017 9:34 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA reviews

Hi Fran –

In December 2016, IRIS released a new URE for ethylene oxide that was 56 times more potent. We went ahead and included the value in our most recent round of point source modeling from December so that you guys would have time to review the results. Here's a link to the IRIS assessment, if you're interested: https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025

Madeleine has contacted LA about the Union Carbide facility, and a few others, and they have said they reviewed them and don't have any changes to the emissions. I'll forward you that email exchange.

As for risks, you want to be sure that you're also reviewing the files from December as that's where the EtO risks show up. For example, for the Union Carbide facility, it isn't 22 in 1 million, but rather 1766 in 1 million. (Sorry for the bad news!) I've pasted below the top facilities in LA.

Please feel free to contact Ted at (919) 541-5470 for additional information about risks at R6 facilities or contact any of us with additional questions.

Thanks,
Darcie

State or Tribe	FIPs	Facility Name	Facility NEI ID	Cancer Risk 2014 (December 2016 Analysis) (in a million)	Cancer Risk 2014 (September 2016 Analysis) (in a million)
LA	22047	BCP Ingredients Inc	7451011	2254.996	10.182
LA	22095	E I DuPont de Nemours & Co - Pontchartrain Site	8026611	2004.231	1572.185
LA	22089	Union Carbide Corp - St Charles Operations	7202911	1766.916	22.492
LA	22047	Taminco US Inc	5504811	1105.059	7.065
LA	22095	Air Products Performance Manufacturing Inc - Reserve Plant	5287111	713.679	10.493
LA	22019	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	8468011	680.012	14.031
LA	22057	Thoma-Sea Marine Constructors LLC - Lockport Yard	5539911	533.960	453.138
LA	22005	Shell Chemical LP - Geismar Plant	7445611	473.742	8.102
LA	22101	CAMERON INTERNATIONAL CORP	16723111	450.624	336.268
LA	22005	BASF Corp - Geismar Site	8465611	317.639	32.325
LA	22047	The Dow Chemical Co - Louisiana Operations	8467311	192.983	31.983

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Verhalen, Frances
Sent: Wednesday, April 05, 2017 10:01 AM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: NATA reviews

We are starting the NATA data reviews (rebuilding institutional knowledge). And there is discussion about ethylene oxide.

What change in risk evaluation has occurred that is causing EtOx to pop? I have attached what we think is the facility with the highest emission for R6, and in LA near LaPlace.

My staff and I are playing catch up and appreciate your assistance in educating us on this topic.

Frances Verhalen, P.E., Chief

Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/13/2018 5:50:47 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: 2014 NATA Short Term actions and facilities list
Attachments: 2014 NATA Facility list for short-term action DRAFT Aug 13 2018.xlsx

---

From: Stenger, Wren
Sent: Monday, August 13, 2018 12:18 PM
To: Gray, David <gray.david@epa.gov>
Cc: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: FW: 2014 NATA Short Term actions and facilities list

My note to OAQPS and the draft short-term facility list.

From: Stenger, Wren
Sent: Monday, August 13, 2018 12:17 PM
To: Koerber, Mike <Koerber.Mike@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>
Cc: Stenger, Wren <stenger.wren@epa.gov>
Subject: 2014 NATA Short Term actions and facilities list

Mike, all,

After hearing the criteria of 1000 in 1M risk for ethylene oxide for the targeted short term action, R6 requests that you remove Air Products Performance Manufacturing Inc—Reserve Plant, LA from the facilities' short-term action list. We can pull it in functionally after 2014 NATA is released, but prefer it is not included on the list. I discussed this with the R6 DRA, and he agrees.

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/13/2018 6:13:05 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: 2014 NATA Short Term actions and facilities list
Attachments: Facility checklist_Aug13 Final.edit.xlsx; ATT00001.htm

---

From: Stenger, Wren
Sent: Monday, August 13, 2018 1:12 PM
To: Gray, David <gray.david@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>
Cc: Thompson, Steve <thompson.steve@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>
Subject: FW: 2014 NATA Short Term actions and facilities list

The revised short term action facilities list, minus the Reserve Plant.

From: Koerber, Mike
Sent: Monday, August 13, 2018 1:00 PM
To: Stenger, Wren <stenger.wren@epa.gov>
Cc: Perez, Idalia <Perez.Idalia@epa.gov>
Subject: Fwd: 2014 NATA Short Term actions and facilities list

Wren - Here is the revised list.

From: "Stenger, Wren" <stenger.wren@epa.gov>
Date: August 13, 2018 at 1:15:43 PM EDT
To: "Koerber, Mike" <Koerber.Mike@epa.gov>, "Sasser, Erika" <Sasser.Erika@epa.gov>, "Lassiter, Penny" <Lassiter.Penny@epa.gov>
Cc: "Stenger, Wren" <stenger.wren@epa.gov>
Subject: 2014 NATA Short Term actions and facilities list

Mike, all,

After hearing the criteria of 1000 in 1M risk for ethylene oxide for the targeted short term action, R6 requests that you remove Air Products Performance Manufacturing Inc—Reserve Plant, LA from the facilities' short-term action list. We can pull it in functionally after 2014 NATA is released, but prefer it is not included on the list. I discussed this with the R6 DRA, and he agrees.

WREN STENGER

DIRECTOR, MULTIMEDIA DIVISION

EPA REGION 6 DALLAS, TEXAS

214.665.6563

Message

From: Smith, Darcie [Smith.Darcie@epa.gov]
Sent: 8/6/2018 2:29:18 PM
To: Bellizzi, Carol [Bellizzi.Carol@epa.gov]; Chow, Alice [chow.alice@epa.gov]; Fry, Jessica [fry.jessica@epa.gov]; Gross-Davis, CarolAnn [Gross-Davis.CarolAnn@epa.gov]; Louis, Egide [Louis.Egide@epa.gov]; Mitchell, Ken [Mitchell.Ken@epa.gov]; Sieffert, Margaret [Sieffert.Margaret@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Olson, Kyle [Olson.Kyle@epa.gov]; Davidson, Ken [Davidson.Ken@epa.gov]
CC: Strum, Madeleine [Strum.Madeleine@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]; Witt, Jon [Witt.Jon@epa.gov]
Subject: FW: TRI 2017 initial data quality calls
Attachments: RY17-NA-Ethylene Oxide List-July2018.xlsx

Hi –

FYI.

As you know, we work with the TRI program to review data as part of NATA, for example for some of the facilities on the review list from 2014 version 1. And, the TRI program is currently reviewing 2017 submittals and has identified some facilities to go through "data quality calls" between now and the end of August. The attached spreadsheet contains a list of these facilities with respect to EtO emissions. We wanted to bring this to your attention, but please work with your regional TRI staff if you have questions about this list, the initial 2017 TRI submittal, or the result of the data quality calls.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Strum, Madeleine
Sent: Monday, August 06, 2018 9:54 AM
To: Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: TRI 2017 initial data quality calls

This is the list of TRI facilities that will be going through "data quality calls" as a result of the 2017 TRI submittals. A data quality call is EPA-TRI program (or contractor) calling a facility and asking about the 2017 emissions/calculations etc. For example, if it is no longer reporting did it make a change that it is no longer required to report (threshold change, NAICS change, etc.).

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Senthil, Velu
Sent: Monday, August 6, 2018 9:49 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>

Cc: Senthil, Velu <Senthil.Velu@epa.gov>
Subject: RE: got your call will try you at 3

Hi Madeleine,
I just shared the list with Regions.
Here is a copy of the list.
Please let me know for more information.
Thanks
Velu Senthil

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/22/2018 2:20:54 PM
To: Madden, Joshua [madden.joshua@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]
Subject: FW: NATA action items from today's call
Attachments: Revised of List of 26 facilities 08 21 2018 R6 w notes.xlsx; Revised of List of 26 facilities 08 21 2018 R6.xlsx

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Wednesday, August 22, 2018 8:50 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: NATA action items from today's call

Thanks, Guy. I looked at the facility spreadsheet, and the tract level risk numbers went up for several of the facilities in our region.

I added the facility names for Huntsman, Eastman, and Sterigenics to the spreadsheet and did and R6 sort (attached). It seems like it would be helpful for the states to have this information. Since the states already have the NEI info. for 2014, they'll know the emission amounts associated with the risk number.

ID	Facility	City	State	Region	V1 Tract	NATA tract	NATA block
7451011	BCP Ingredients Inc	St. Gabriel	Louisiana	06	144	2000	2,539
7202911	Union Carbide Corp - St Charles Operations	Taft	Louisiana	06	662	2000	1,680
4945211	PORT NECHES PLANT (Huntsman Corp.)	PORT NECHES	Texas	06	229	300	1,456
4941511	TEXAS OPERATIONS (Eastman Chemical Co.)	LONGVIEW	Texas	06	51	200	1,355
5504811	Taminco US Inc	St. Gabriel	Louisiana	06	144	200	1,330
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Westlake	Louisiana	06	76	100	841
5287111	Air Products Performance Manufacturing Inc - Reserve Plant (EVONIK MATERIALS CORP)	Reserve	Louisiana	06	196	100	831
3736811	SHELL TECHNOLOGY CENTER HOUSTON	HOUSTON	Texas	06	195	300	291
9061511	Midwest Sterilization Corp	Laredo	Texas	06	117	100	219
7582111	Santa Teresa Facility (Sterigenics)	Santa Teresa	New Mexico	06	131	200	135

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Wednesday, August 22, 2018 7:22 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Taheri, Diane <Taheri.Diane@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: NATA action items from today's call

FYI

From: Stenger, Wren
Sent: Wednesday, August 22, 2018 7:16 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fw: NATA action items from today's call

From: Perez, Idalia
Sent: Tuesday, August 21, 2018 4:29 PM
To: Air Division Directors and Deputies
Cc: Davis, Alison; Bremer, Kristen; Rimer, Kelly; Smith, Darcie; Caparoso, Jennifer; Lassiter, Penny; Shappley, Ned; Sasser, Erika; Koerber, Mike
Subject: RE: NATA action items from today's call

Adding the fact sheets to the earlier thread. Please note that these are not the final versions – formatting still needs to be done. This should be enough to help folks prep for tomorrow.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

From: Perez, Idalia
Sent: Tuesday, August 21, 2018 12:53 PM
To: Air Division Directors and Deputies <Air_Division_Directors_and_Deputies@epa.gov>
Cc: Davis, Alison <Davis.Alison@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>; Shappley, Ned

<Shappley.Ned@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>; Koerber, Mike <Koerber.Mike@epa.gov>
Subject: NATA action items from today's call

ADD,

At the bottom of the emails are the following action items from today's call:

- Facility list (see attachment, not below)
- Information for August 22 Regional Call re: Workgroups
- Corporate call list
- Invitees to congressional call

Still pending:

- Invitees to communities call – still putting this together – will be sent separate in the next day or so
- Materials (fact sheets) – will be sent separate later today

Please let me know if there is anything else that you need and we will work to get it to you as soon as possible.
-Idalia

1. Information for August 22 Regional Call re: Workgroups

   Wednesday, August 22 at 3:30 p.m. – 4:30 p.m. EDT
   919 541 1595 (no pass code)
   Initial call with Regions to begin coordinating efforts for controlling ethylene oxide air emissions at chemical facilities
   (ADDs: please invite appropriate staff)

2. Corporate call list – see below

DRAFT - INTERNAL USE ONLY

Organization	Contact
Air Products Performance (now Evonik)	Teresa Reksel
B Braun Medical	Rex Boland
BASF Corporation	Mark Allen
BCP Ingredients	
C R Bard	Beth Bruette
Croda Inc.	
Edwards Lifesciences	Manuel Palma
Medline	
Medtronic (a.k.a. MedPlat/Viant)	Cindy Resman
Midwest Sterilization Corporation	Wayne Fitzpatrick
Port Neches Plant (Hunstman)	Ed Gunderson
Sasol Chemical - LCCC	Annette Habetz

Shell Technology Center Houston	Kenyatta Miles
Solvay (now Lanxess)	Rob Trozenski
Sterigenics	Kathy Hoffman
Terumo BCT	Jay Willis
Texas Operations (Eastman)/Taminco US (subsiduary of Eastman)	Steve Gossett
Union Carbide/Dow	Russell Wozniak

3. Invitees to congressional call – see below

DRAFT DRAFT DRAFT -- best guesses for congressional districts and nearby districts representing census tracts or block groups with higher risk numbers

State	City	EPA Region	MSA Area Name	US_rep	US_rep_aff	US_rep_dist	US_Sen_1	US_Sen_1_aff
Puerto Rico	Anasco	02	Aguadilla-Isabela, PR	Gonzalez-Colon, Jenniffer	R	Puerto Rico		
West Virginia	SOUTH CHARLESTON	03		Mooney, Alex	R	WV-2	Manchin, Joe	D
Pennsylvania	ALLENTOWN	03	Allentown-Bethlehem-Easton, PA-NJ	vacant		PA-15	Casey, Robert "Bob"	D
Delaware	New Castle	3	Philly-Camden-Wilmington	Rochester, Lisa	D	DE-AL	Carper, Tom	D
South Carolina	CHARLESTON	04	Charleston-North Charleston, SC	Clyburn, James "Jim"	D	SC-6	Graham, Lindsey	R
Georgia	Covington	4	Atlanta	Johnson, Hank	D	GA-04	Isakson, Johnny	R
Georgia	Smyrna	4	Atlanta	Lowdermilk, Barry	R	GA-11	Isakson, Johnny	R
Wisconsin	Milton	05		Ryan, Paul	R	WI-1	Johnson, Ron	R
Illinois	Willowbrook	05	Chicago-Naperville-Elgin, IL-IN-WI	Foster, Bill	D	IL-11	Durbin, Richard	D
Michigan	Wyoming	5	Grand Rapids-Wyoming	Huizenga, Bill	R	MI-02	Stabenow, Debbie	D

Texas	LONGVIEW	06	Marshall, TX	Gohmert, Louie	R	TX-1	Cornyn, John	R
Texas	PORT NECHES	06	Beaumont-Port Arthur, TX	Weber, Randy	R	TX-14	Cornyn, John	R
Louisiana	St. Gabriel	06	Baton Rouge, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
Louisiana	Taft	06	New Orleans-Metairie, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
Louisiana	St. Gabriel	06	New Orleans-Metairie, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
New Mexico	Santa Teresa	6	Las Cruces	Pearce, Stevan	R	NM-02	Udall, Tom	D
Texas	Laredo	6	Laredo	Cuellar, Henry	D	TX-28	Cornyn, John	R
Texas	Clear Lake	6	Houston	Babin, Brian	R	TX-36	Cornyn, John	R
Texas	Channelview	6	Houston	Green, Gene	D	TX-29	Cornyn, John	R
Missouri	VERONA	07		Long, Billy	R	MO-7	McCaskill, Claire	D
Missouri	Jackson	07	Cape Girardeau, MO-IL	Smith, Jason	R	MO-8	McCaskill, Claire	D
Colorado	Lakewood	8	Denver	Perlmutter, Ed	d	CO-07	Bennet, Michael	D

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

2014 NATA Ethylene Oxide Facilities Region 6					
Driver Facility Name	State or Tribe	LOCATION_CITY	NAICS Description	Facility Type	Driver Pollutant Emissions (TONS)
Union Carbide Corp - St Charles Operations (Dow Chem.)	LA	Taft	Petrochemical Manufacturing	Chemical Plant	15.032
Bayport Underwood Plant (Lyondell Basell Co.)	TX	Pasadena	Petrochemical Manufacturing	Chemical Plant	6.772
Port Neches Plant (Huntsman Corp.)	TX	PORT Neches	Petrochemical Manufacturing	Chemical Plant	10.776
BCP Ingredients Inc (Balchem Co.)	LA	St. Gabriel	Other Animal Food Manufacturing	Sterilizer	2.501
Air Products Performance Manufacturing Inc - Reserve Plant	LA	Reserve	Surface Active Agent Manufacturing		1.610
Texas Operations (Eastman Chemical Co.)	TX	Longview	Petrochemical Manufacturing	Chemical Plant	7.413
Santa Teresa Facility (Sterigenics)	NM	Santa Teresa	Medical and Diagnostic Laboratories	Sterilizer	2.880
Midwest Sterilization Corp	TX	Laredo	Surgical Appliance and Supplies Man.	Sterilizer	7.869
Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	LA	Westlake	All Other Basic Organic Chem. Man.	Chemical Plant	6.319
Shell Chemical LP - Geismar Plant	LA	Geismar	Petrochemical Manufacturing	Chemical Plant	4.829
BASF Corp - Geismar Site	LA	Geismar	All Other Basic Organic Chem. Man.	Chemical Plant	7.139
Taminco US Inc (Eastman Chemical Co.)	LA	St. Gabriel	All Other Basic Organic Chem. Man.	Chemical Plant	1.149
The Dow Chemical Co - Louisiana Operations	LA	Plaquemine	All Other Basic Organic Chem. Man.	Chemical Plant	1.802
Shell Technology Center Houston	TX	Houston	Petrochemical Manufacturing	Chemical Plant	0.459
Clear Lake Plant (Celanese Corp.)	TX	Pasadena	Petrochemical Manufacturing	Chemical Plant	5.946
Channelview Plant (Lyondell Basell Co.)	TX	Channelview	Petrochemical Manufacturing	Chemical Plant	0.959

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 12/4/2017 4:45:37 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: NATA Ethylene Oxide Briefing Papers
Attachments: Priority Facilities Sheet..xlsx; Guy NATA briefing sheet 1 with edits fv.docx

Josh, take a look at the spreadsheet and see if this is the appropriate level of info for Guy/Wren. I edited all of Fran's comments, too, so the We Care should be ready to go.

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/14/2017 2:50:31 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: ethylene oxide emissions - NATA review

Checking up on a few things today:

1) Can we verify what the permit limits for the facilities discussed below are? I think they are on Nevine's chart. If not, we should ask her, if we have the permits posted, to verify what their EtO limits are.
2) I sent Nevine an email to check on permit limits for Bayport Underwood – it is the Pasadena location of Lyondell Basell. Will forward you the email I sent her.

If the reported emissions are below the permitted levels for these facilities, then they may drop off the list?

Another question – do you know if the change from census block to census tract is the only reason some of the facilities dropped off? That's the premise we've been working under, but I wonder?

Hope you had a good weekend.

Cindy

From: Kelly Petersen [mailto:Kelly.Petersen@LA.GOV]
Sent: Thursday, July 06, 2017 2:10 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Maureen Ducote <Maureen.Ducote@la.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: ethylene oxide emissions - NATA review

Those are the reported values and they are below the permitted limit. We have no reason to doubt the data.

Kelly Petersen
Air Planning and Assessment Division
Louisiana Department of Environmental Quality
Phone: (225) 219-3397 Fax: (225) 325-8141 kelly.petersen@la.gov

---

From: Strum, Madeleine [mailto:Strum.Madeleine@epa.gov]
Sent: Wednesday, July 05, 2017 11:48 AM
To: Kelly Petersen
Cc: Verhalen, Frances; Palma, Ted; Smith, Darcie; Maureen Ducote; Parker, Cindy; Madden, Joshua
Subject: RE: ethylene oxide emissions - NATA review

Hi Kelly
There are 2 more facilities (listed below) that I don't have a record of your reviewing. Can you let me know if these emissions (columns highlighted in yellow) are correct? These facilities cause the tract risk to exceed 100 in a million:

Note that details on the process/release point (modeling file) ethylene oxide emissions are attached.

Thanks!!!

State	EPA Region	County	FIPS	Tract	Population	TRACT PT-StationaryPoint Cancer Risk (per million)	Driver Facility	State Reviewed Data? (Y/N) 5/15/17 version	Change Submitted ? (Y/N)	NOTES	State or Tribe	FI
LA	EPA Region 6	Ascension	22005	22005030300	13728	97.828	7445611				Louisiana	225
LA	EPA Region 6	Iberville	22047	22047953102	2449	95	8467311				Louisiana	227

Madeleine Strum|U.S. Environmental Protection Agency|109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Kelly Petersen [mailto:Kelly.Petersen@LA.GOV]
Sent: Tuesday, March 21, 2017 5:16 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Maureen Ducote <Maureen.Ducote@la.gov>
Subject: RE: ethylene oxide emissions - NATA review

Madeleine,
I reviewed these emissions and they are all below the permitted limit, so I have no reason to doubt their validity. See the updates to the chart below.

Thanks,
Kelly Petersen
Air Planning and Assessment Division
Louisiana Department of Environmental Quality
Phone: (225) 219-3397 Fax: (225) 325-8141 kelly.petersen@la.gov

---

From: Strum, Madeleine [mailto:Strum.Madeleine@epa.gov]
Sent: Tuesday, March 21, 2017 7:45 AM
To: Kelly Petersen
Cc: Verhalen, Frances; Palma, Ted; Smith, Darcie
Subject: ethylene oxide emissions - NATA review

Hi Kelly,

A number of Louisiana facilities have ethylene oxide (EtO) emission estimates that could result in highly elevated tract risks. As we indicated in our January 2014 NATA modeling update (email from Sally Dombrowski 1/27/2017), the cancer health benchmark for Ethylene Oxide (EtO) was updated by EPA in December 2016 (https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025) and cancer risk levels for this pollutant are approximately 50 times higher.

In terms of annual emissions, the largest is Union Carbide, at about 15 tons EO emissions.

State or Tribe	FIPS	County	EIS facility_id	agy_facility_id	facility_name
Louisiana	22089	St. Charles	7202911	2083	Union Carbide Operations
Louisiana	22047	Iberville	7451011	27495	BCP Ingredien Inc
Louisiana	22047	Iberville	5504811	3263	Taminco US Inc
Louisiana	22095	St. John the Baptist	5287111	13560	Air Products P Manufacturing Plant
Louisiana	22005	Ascension	8465611	2049	BASF Corp - Ge Site
Louisiana	22019	Calcasieu	8468011	3271	Sasol Chemica Charles Chemi

These (along with a few others)are all on the "Jan2017 Update" of the SharePoint check list https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/Data/CheckList/checklist.xlsx?d=w276998ab32364c90a67e05342b2904ac

Have you verified the emissions and release parameters for these facilities?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/21/2018 8:42:58 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: URGENT - instructions for state/local preview of NATA
Attachments: Updates_to_Emissions_2014NATA.docx

From: Smith, Darcie
Sent: Tuesday, August 21, 2018 2:49 PM
To: Kuehn, Elizabeth, NMENV <Elizabeth.Kuehn@state.nm.us>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>
Subject: RE: URGENT - instructions for state/local preview of NATA

Attached is the document we spoke of – the "updates to emissions" page. It contains where we know a facility has reduced emissions since 2014 (Sterigenics is in this bin) and other updates. This will be on the public-facing website.

I have spoken with Cindy about changes for the talking points.

And, I will look at the Map App and website later this afternoon, as we discussed, for any place the MSA name appears.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Kuehn, Elizabeth, NMENV [mailto:Elizabeth.Kuehn@state.nm.us]
Sent: Tuesday, August 21, 2018 3:17 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: FW: URGENT - instructions for state/local preview of NATA
Importance: High

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 4/6/2018 4:23:56 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
CC: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: 2014 NATA version 2 - DRAFT ethylene oxide point source risks
Attachments: ForRegions_EtO_Emissions_and_Risk_Review_V2NATA_031518.pdf; ForRegions_EtOReview_V2NATA_031518.xlsx

Yes, same spreadsheet as here.
At the bottom of page 2 of the word document, is a chart that shows, by HQ count, how many facilities in each region. For R6, it shows 13. If you count up the 'yes' answers in column K of the spreadsheet, you also get 13.
Since the emissions are still estimates, until HQ gets confirmation, we went with 13. Thinking, its better to brief 'a number of facilities fell off the list', rather than expand the number. And, we thought Wren would also be hearing that number at the ADD meeting.
I can see how you got your 10. If you'd rather go with 10, that's good. Easy change.

From: Smith, Darcie
Sent: Thursday, March 15, 2018 6:03 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Bollweg, George <bollweg.george@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Glass, Geoffrey <GLASS.GEOFFREY@EPA.GOV>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Kierys, Dawid <kierys.dawid@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Owens, Katharine <Owens.Katharine@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Stone, William <stone.william@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Berner, Ted <Berner.Ted@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>
Subject: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hello –

You are receiving this email because you are a member of the ATRA EtO group or a NATA Regional Office lead or both. Either way, you know that in version 1 of the 2014 NATA we saw ethylene oxide emissions from point sources driving risks at the census tract level. Since that time, you have reviewed the data, worked with your states to review the data, and provided revisions back to us. We have incorporated those changes from V1 of the 2014 NATA and in preparation for version 2, have re-modeled the EtO-emitting point sources first. This is your first look at those results. **Please remember that risk results are not to be shared outside the Agency**.

The attached pdf document provides: 1) a summary of the events of the emissions review, 2) a regional count of facilities in the attached spreadsheet, and 3) an explanation of the data fields in the attached spreadsheet file. The attached spreadsheet contains a list of facilities that had a census *block* level cancer risk greater than 100-in-1 million in either version 1 (column J) or version 2 (column K). These are all provided so you can see how any data changes impacted the risk results. As you will see, there are still some facilities where we have estimated a census *tract* level

cancer risk of greater than 100-in-1 million in version 2. These are indicated with a "Y" in column K. (An exact risk number is not provided because the estimates only take into account the AERMOD modeling; CMAQ is not yet complete so we have not combined the two results and we have given you our best estimate.)

We know that some of you are actively working with your states on the data review. Thank you for your time and effort doing that! There are some columns in the spreadsheet that may help focus your conversations, for example, column N, which provides information on how the EtO emissions were calculated for the process with the most emissions. And, our engineers are also working through their contacts to continue to verify the emissions and other inputs to the modeling. (If you need to contact them, Jennifer (chemical manufacturing) and Jonathan (sterilizers) are in the "CC" field.) There are columns in the spreadsheet to indicate what has been done and what type of changes have been received or are expected. **However, without additional information, there will likely be little change to these results.** If you have received additional info or revisions, please work with Madeleine to get those to us.

As you continue to work through this situation, please let us know if there's anything we can do to help or if there's additional data you need. We are happy to walk through this on the next ATRA call or set up a special purpose call. As always, if you have questions please feel free to contact me, Ted (palma.ted@epa.gov, 919-541-5470), or Madeleine (strum.madeleine@epa.gov, 919-541-2383).

Thank you,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 8/14/2018 3:04:56 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: Steve Thompson report of meeting with Sec. Brown.
Attachments: 2014 NATA Results Dr Brown 081418.pptx

From: Donaldson, Guy
Sent: Tuesday, August 14, 2018 8:33 AM
To: Price, Lisa <Price.Lisa@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: FW: Steve Thompson report of meeting with Sec. Brown.

Fran's folks put this together as something we could potentially share with Sec. Brown.

From: Parker, Cindy
Sent: Friday, August 10, 2018 2:23 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>
Cc: Feldman, Michael <Feldman.Michael@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: Steve Thompson report of meeting with Sec. Brown.

Guy,
On the email below, Fran's comments in yellow; I added details in blue.
A couple of the slides discuss cancer risk - detailed cancer risk info is included in slides #9, #10. Not sure it's appropriate to share at this time, but left it included for your info; please delete if necessary.
I've cc'd Fran, Michael, and Josh, but I haven't forwarded to anyone else.
Cindy

From: Verhalen, Frances
Sent: Friday, August 10, 2018 1:47 PM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Feldman, Michael <Feldman.Michael@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Steve Thompson report of meeting with Sec. Brown.

1) Secretary Brown would like to see NATA maps. As of today, the maps are not available. However, we have the draft map from the 7/17/18 presentation that is close. . Cindy will be sending you a powerpoint. Slide #5 shows MSAs.
2) He is interested in details regarding the communication plan for NATA and particularly are how long are the States going to be able to review before the results are released to the public. Cindy will be sending you a powerpoint. Slide #8 shows Moving Forward timeline.
3) He is also interested in the modeling we have done for Denka. (Michael)

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Donaldson, Guy
Sent: Thursday, August 09, 2018 4:21 PM
To: Price, Lisa <Price.Lisa@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Feldman, Michael <Feldman.Michael@epa.gov>
Subject: Steve Thompson report of meeting with Sec. Brown.

Steve called me to give me a heads up of things that came up from their meeting with Sec. Brown regarding Denka and NATA.

Secretary Brown will be in the Regional office on Wednesday 8/15 (apparently after being in Ada for a meeting and before the Love field meeting)

1) Secretary Brown would like to see NATA maps
2) He is interested in details regarding the communication plan for NATA and particularly are how long are the States going to be able to review before the results are released to the public.
3) He is also interested in the modeling we have done for Denka.

Steve believes he doesn't necessarily want the info sent to him but would like to see it on Wednesday when he is the office.

Fran, please pull the draft roll out strategy and send to me so I can have for Wednesday if necessary.
Also check on availability of Maps.

Michael,

Please work with Bob to pare down the modeling power point to something that could be present if necessary. We probably need it by Tuesday to show Wren.

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 6/11/2018 7:39:56 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: - Ethylene Oxide NATA
Attachments: Ethylene Oxide NATA V2 w out risk.xlsx

FYI.
Note - the number of facilities on Darrin's spreadsheet is 20. The number of facilities mentioned in the We Care is 15. EN shared an earlier list of facilities, and we know some of them have dropped off - ie, Baxter Healthcare in AR - it dropped off when the data went from being sorted at tract level (V1) to block level (V2). But this particular spreadsheet was what EN shared with LDEQ, and since Anne was meeting/travelling/talking with Dr Brown, EN wanted to be sure Anne had the same info Dr Brown had.
I tell you this in case we have to explain this data in the future.
Josh - another fine example that, somehow, we need to be sure when data is pulled from spreadsheets we have tagged it, dated it, or named it somehow, so we know where that data came from and when it was pulled - that's just my two cents - some of the info on this spreadsheet is way old!!
Fran, should you hear any feedback from the RA's convo with LDEQ, can you share, pls? Curious to know the state's thoughts.

Cindy,

-----Original Message-----
From: Larson, Darrin
Sent: Monday, June 11, 2018 12:00 PM
To: Parker, Cindy <parker.cindy@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Thompson, Steve <thompson.steve@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: - Ethylene Oxide NATA

In case you get asked about the spreadsheet I just sent to David for Anne's use, it's all 20 facilities being evaluated for inclusion in NATA on the most recent list (V2), not just the 13 likely to remain on the list at this point (the number in the RA briefing paper). We shared w/ LDEQ the full list of LA facilities, and didn't want to cause confusion by leaving off the expected "no" facilities, especially since they're not off the list until they're officially off the list.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA) U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

-----Original Message-----
From: Larson, Darrin
Sent: Monday, June 11, 2018 11:47 AM
To: Gray, David <gray.david@epa.gov>; McGee, Tomika <McGee.Tomika@epa.gov>
Cc: Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>; Gilrein, Stephen <gilrein.stephen@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Lindley, Emily <lindley.emily@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: Canceled: HOLD - Ethylene Oxide NATA

Here's the list of R6 facilities being evaluated for inclusion in NATA for ethylene oxide.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA) U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

-----Original Message-----
From: Gray, David
Sent: Monday, June 11, 2018 9:29 AM
To: McGee, Tomika <McGee.Tomika@epa.gov>
Cc: Stenger, Wren <stenger.wren@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Seager, Cheryl <Seager.Cheryl@epa.gov>; Gilrein, Stephen <gilrein.stephen@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Donaldson, Guy <Donaldson.Guy@epa.gov>; Lindley, Emily <lindley.emily@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: Re: Canceled: HOLD - Ethylene Oxide NATA

I need a briefing sheet ASAP

Sent from my iPhone

> On Jun 5, 2018, at 1:41 PM, McGee, Tomika <McGee.Tomika@epa.gov> wrote:
>
> This meeting has been scheduled for June 14 at 2 PM and will be held in the RA's large conference room. Invite sent by HQ's.
> <meeting.ics>

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 6/14/2018 5:48:57 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: today's meeting with Wren, Cheryl -
Attachments: Ethylene Oxide NATA V2 w 061418 names.xlsx

fyi

From: Larson, Darrin
Sent: Thursday, June 14, 2018 12:46 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: today's meeting with Wren, Cheryl -

Here's a V2 spreadsheet with the ones that NOT on the slides grayed out.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Thursday, June 14, 2018 12:37 PM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: RE: today's meeting with Wren, Cheryl -

No, all we got was the slides, too.

From: Larson, Darrin
Sent: Thursday, June 14, 2018 11:58 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: today's meeting with Wren, Cheryl -

I've got non-stop meetings/conf. calls until 1 pm, but I just took a look at the slides.

I didn't get a spreadsheet from Erika—just the slides. Did you? If not, can you reach out to Darcie and ask her if she has a spreadsheet w/ updated numbers? The slides have names but not numbers.

I think we can tell Cheryl and Wren that we just got the slides and are seeing if we can get a spreadsheet with numbers, and are planning to share updated lists with the states (w/out risk). It would be good to share emission amounts, which aren't in the slides.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6

Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Thursday, June 14, 2018 10:56 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: today's meeting with Wren, Cheryl -

Are y'all preparing a list of the companies names to go with the spreadsheet Erica sent?
Are you doing anything with the spreadsheet you (Darrin) gave everyone on Monday to compare that list to the final list in Erica's slideshow?
Just in case there are questions from either Wren or Cheryl.

Also, did you note that Erica's message/slide show went to David, Anne, and Emily as well??

Appointment

From: Mozingo, Kristal [Mozingo.Kristal@epa.gov]
Sent: 6/14/2018 3:23:39 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]; Seager, Cheryl [Seager.Cheryl@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]; Gray, David [gray.david@epa.gov]; Vandenberg, John [Vandenberg.John@epa.gov]; Koerber, Mike [Koerber.Mike@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]
CC: Langdon, Robin [Langdon.Robin@epa.gov]; Noonan, Jenny [Noonan.Jenny@epa.gov]; Wayland, Richard [Wayland.Richard@epa.gov]; Houyoux, Marc [Houyoux.Marc@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; McGee, Tomika [McGee.Tomika@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Taheri, Diane [Taheri.Diane@epa.gov]; Welton, Patricia [Welton.Patricia@epa.gov]; Idsal, Anne [idsal.anne@epa.gov]; Lindley, Emily [lindley.emily@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]

Subject: NATA Results Briefing for Region 6 - Room C501A - Phone 1(202) 991-0477 Conference I.D. 1200676 *ATTACHMENT*
Attachments: 2014 NATA Results Briefing for R6 staff.pptx
Location: RTP-OAQPS-C501A/RTP-OAQPS-BLDG-C

Start: 6/14/2018 7:00:00 PM
End: 6/14/2018 8:00:00 PM
Show Time As: Tentative

Required Attendees: Smith, Darcie; Palma, Ted; Strum, Madeleine; Bremer, Kristen; Seager, Cheryl; Stenger, Wren; Gray, David; Vandenberg, John; Koerber, Mike; Jones, Rhea
Optional Attendees: Langdon, Robin; Noonan, Jenny; Wayland, Richard; Houyoux, Marc; Verhalen, Frances; McGee, Tomika; Donaldson, Guy; Price, Lisa; Parker, Cindy; Madden, Joshua; Larson, Darrin; Ahuja, Anupa; Taheri, Diane; Welton, Patricia; Idsal, Anne; Lindley, Emily; Thompson, Steve

---

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Conference ID: 1200676

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Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 6/22/2018 8:11:29 PM
To: Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: Draft Sterigenics news release
Attachments: 2018 June 21 Region 5 EtO Briefing.docx; Ethylene Oxide Short Term Air Monitoring Results Briefing 06202018.pptx

Close hold, please

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Gray, David
Sent: Thursday, June 21, 2018 1:45 PM
To: Stenger, Wren <stenger.wren@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: Draft Sterigenics news release

Ex. 5 Deliberative Process (DP)

Jeff Kelley
Director, Office of External Communications

U.S. EPA Region 5
ph: 312-353-1159

Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 8/22/2018 7:31:16 PM
To: Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: Fwd: NATA action items from today's call

Sent from my iPhone

Begin forwarded message:

> **From:** "Larson, Darrin" <Larson.Darrin@epa.gov>
> **Date:** August 22, 2018 at 1:50:29 PM CDT
> **To:** "Verhalen, Frances" <verhalen.frances@epa.gov>, "Donaldson, Guy" <Donaldson.Guy@epa.gov>
> **Subject: RE: NATA action items from today's call**
>
> For the 2:30 call, are you going to be in Guy's office?
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> ---
>
> **From:** Verhalen, Frances
> **Sent:** Wednesday, August 22, 2018 1:03 PM
> **To:** Donaldson, Guy <Donaldson.Guy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
> **Cc:** Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
> **Subject:** RE: NATA action items from today's call
>
> Guy,
> You are correct. The total risk is what we will 'show' on the NATA map app. The information provided previously was *PRELIMINARY* and did not include all the final compilations or calculations necessary for dissemination.
>
> Darrin,
> What does the State(s) expect to use our NATA risk information for? NATA is a projected risk indicator for an area and cannot/does not specify risk for an individual.
>
> Frances Verhalen, P.E., Chief
> Air Monitoring/Grants Section
> US Environmental Protection Agency
> 1445 Ross Avenue (MC 6MM-AM)
> Dallas, TX 75202
> 214-665-2172
> verhalen.frances@epa.gov

From: Donaldson, Guy
Sent: Wednesday, August 22, 2018 10:28 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: NATA action items from today's call

Well I am hesitant to send to the States if we don't know why the numbers are different. I'm pretty sure I a right that its now showing total risk vs the EthOx specific risk shown below

---

From: Larson, Darrin
Sent: Wednesday, August 22, 2018 9:49 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA action items from today's call

I'm not sure why the tract numbers are different. For Version 2, which is what we've been using for all of our spreadsheets, there wasn't a V2 tract number, just a reference to the V1 tract number, V2 and V1 block numbers, and a yes/no to the question as to whether it was likely to be above 100 at the tract level.

Facility Name	State	City	Facility Typ	V1 MIR @ block (in 1 million)	V2 MIR @ block (in 1 million)	V1 Max Tract Cancer Risk (in 1 million) (from EthOx specific tract file)	Is Census Tract Cancer Risk expected to be > 100 in 1-million in V2?	V1 EtO emissions (tons)	V2 EtO emissions (tons)
Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana	Taft	Chemical Plant	1,760	1,680	662	Yes	15	15
PORT NECHES PLANT (Huntsman Corp.)	Texas	PORT NECHES	Chemical Plant	1,416	1,456	229	Yes	11	11
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana	Reserve	Chemical Plant	713	831	196	Yes	2	2
SHELL TECHNOLOGY CENTER HOUSTON	Texas	HOUSTON	Chemical Plant	422	291	195	Yes	0.5	0.5
BCP Ingredients Inc (Balchem Co.)	Louisiana	St. Gabriel	Sterilizer	2,255	2,539	144	Yes	3	3
Taminco US Inc (Eastman Chemical Co.)	Louisiana	St. Gabriel	Chemical Plant	1,099	1,330	144	Yes	1	1
Santa Teresa Facility (Sterigenics)	New Mexic	Santa Teresa	Sterilizer	136	135	131	Yes	3	3
Midwest Sterilization Corp	Texas	Laredo	Sterilizer	219	219	117	Yes	8	8
Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Louisiana	Westlake	Chemical Plant	675	841	76	Yes	6	6
TEXAS OPERATIONS (Eastman Chemical Co.)	Texas	LONGVIEW	Chemical Plant	1,293	1,355	51	Yes	7	7

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Wednesday, August 22, 2018 9:28 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA action items from today's call

So I assume for the most part the numbers are different because these are totals and what we shared before with ETO only?

From: Larson, Darrin
Sent: Wednesday, August 22, 2018 8:50 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: NATA action items from today's call

Thanks, Guy. I looked at the facility spreadsheet, and the tract level risk numbers went up for several of the facilities in our region.

I added the facility names for Huntsman, Eastman, and Sterigenics to the spreadsheet and did and R6 sort (attached). It seems like it would be helpful for the states to have this information. Since the states already have the NEI info. for 2014, they'll know the emission amounts associated with the risk number.

ID	Facility	City	State	Region	V1 Tract	NATA tract	NATA block
7451011	BCP Ingredients Inc	St. Gabriel	Louisiana	06	144	2000	2,539
7202911	Union Carbide Corp - St Charles Operations	Taft	Louisiana	06	662	2000	1,680
4945211	PORT NECHES PLANT (Huntsman Corp.)	PORT NECHES	Texas	06	229	300	1,456
4941511	TEXAS OPERATIONS (Eastman Chemical Co.)	LONGVIEW	Texas	06	51	200	1,355
5504811	Taminco US Inc	St. Gabriel	Louisiana	06	144	200	1,330
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Westlake	Louisiana	06	76	100	841
5287111	Air Products Performance Manufacturing Inc - Reserve Plant (EVONIK MATERIALS CORP)	Reserve	Louisiana	06	196	100	831
3736811	SHELL TECHNOLOGY CENTER HOUSTON	HOUSTON	Texas	06	195	300	291
9061511	Midwest Sterilization Corp	Laredo	Texas	06	117	100	219
7582111	Santa Teresa Facility (Sterigenics)	Santa Teresa	New Mexico	06	131	200	135

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Donaldson, Guy
Sent: Wednesday, August 22, 2018 7:22 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Taheri, Diane <Taheri.Diane@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>

Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: NATA action items from today's call

FYI

From: Stenger, Wren
Sent: Wednesday, August 22, 2018 7:16 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fw: NATA action items from today's call

From: Perez, Idalia
Sent: Tuesday, August 21, 2018 4:29 PM
To: Air Division Directors and Deputies
Cc: Davis, Alison; Bremer, Kristen; Rimer, Kelly; Smith, Darcie; Caparoso, Jennifer; Lassiter, Penny; Shappley, Ned; Sasser, Erika; Koerber, Mike
Subject: RE: NATA action items from today's call

Adding the fact sheets to the earlier thread. Please note that these are not the final versions – formatting still needs to be done. This should be enough to help folks prep for tomorrow.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

From: Perez, Idalia
Sent: Tuesday, August 21, 2018 12:53 PM
To: Air Division Directors and Deputies <Air_Division_Directors_and_Deputies@epa.gov>
Cc: Davis, Alison <Davis.Alison@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>; Shappley, Ned <Shappley.Ned@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>; Koerber, Mike <Koerber.Mike@epa.gov>
Subject: NATA action items from today's call

ADD,

At the bottom of the emails are the following action items from today's call:

- <!--[if !supportLists]--><!--[endif]-->Facility list (see attachment, not below)

- <!--[if !supportLists]--><!--[endif]-->Information for August 22 Regional Call re: Workgroups
- <!--[if !supportLists]--><!--[endif]-->Corporate call list
- <!--[if !supportLists]--><!--[endif]-->Invitees to congressional call

Still pending:

- <!--[if !supportLists]--><!--[endif]-->Invitees to communities call – still putting this together – will be sent separate in the next day or so
- <!--[if !supportLists]--><!--[endif]-->Materials (fact sheets) – will be sent separate later today

Please let me know if there is anything else that you need and we will work to get it to you as soon as possible.
-Idalia

1. Information for August 22 Regional Call re: Workgroups

   Wednesday, August 22 at 3:30 p.m. – 4:30 p.m. EDT
   919 541 1595 (no pass code)
   Initial call with Regions to begin coordinating efforts for controlling ethylene oxide air emissions at chemical facilities
   (ADDs: please invite appropriate staff)

2. Corporate call list – see below

DRAFT - INTERNAL USE ONLY

Organization	Contact
Air Products Performance (now Evonik)	Teresa Reksel
B Braun Medical	Rex Boland
BASF Corporation	Mark Allen
BCP Ingredients	
C R Bard	Beth Bruette
Croda Inc.	
Edwards Lifesciences	Manuel Palma
Medline	
Medtronic (a.k.a. MedPlat/Viant)	Cindy Resman
Midwest Sterilization Corporation	Wayne Fitzpatrick
Port Neches Plant (Hunstman)	Ed Gunderson
Sasol Chemical - LCCC	Annette Habetz
Shell Technology Center Houston	Kenyatta Miles
Solvay (now Lanxess)	Rob Trozenski
Sterigenics	Kathy Hoffman

Terumo BCT	Jay Willis
Texas Operations (Eastman)/Taminco US (subsiduary of Eastman)	Steve Gossett
Union Carbide/Dow	Russell Wozniak

3. Invitees to congressional call – see below

DRAFT DRAFT DRAFT -- best guesses for congressional districts and nearby districts representing census tracts or block groups with higher risk numbers

State	City	EPA Region	MSA Area Name	US_rep	US_rep_aff	US_rep_dist	US_Sen_1	US_Sen_
Puerto Rico	Anasco	02	Aguadilla-Isabela, PR	Gonzalez-Colon, Jenniffer	R	Puerto Rico		
West Virginia	SOUTH CHARLESTON	03		Mooney, Alex	R	WV-2	Manchin, Joe	D
Pennsylvania	ALLENTOWN	03	Allentown-Bethlehem-Easton, PA-NJ	vacant		PA-15	Casey, Robert "Bob"	D
Delaware	New Castle	3	Philly-Camden-Wilmington	Rochester, Lisa	D	DE-AL	Carper, Tom	D
South Carolina	CHARLESTON	04	Charleston-North Charleston, SC	Clyburn, James "Jim"	D	SC-6	Graham, Lindsey	R
Georgia	Covington	4	Atlanta	Johnson, Hank	D	GA-04	Isakson, Johnny	R
Georgia	Smyrna	4	Atlanta	Lowdermilk, Barry	R	GA-11	Isakson, Johnny	R
Wisconsin	Milton	05		Ryan, Paul	R	WI-1	Johnson, Ron	R
Illinois	Willowbrook	05	Chicago-Naperville-Elgin, IL-IN-WI	Foster, Bill	D	IL-11	Durbin, Richard	D
Michigan	Wyoming	5	Grand Rapids-Wyoming	Huizenga, Bill	R	MI-02	Stabenow, Debbie	D
Texas	LONGVIEW	06	Marshall, TX	Gohmert, Louie	R	TX-1	Cornyn, John	R

Texas	PORT NECHES	06	Beaumont-Port Arthur, TX	Weber, Randy	R	TX-14	Cornyn, John	R
Louisiana	St. Gabriel	06	Baton Rouge, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
Louisiana	Taft	06	New Orleans-Metairie, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
Louisiana	St. Gabriel	06	New Orleans-Metairie, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
New Mexico	Santa Teresa	6	Las Cruces	Pearce, Stevan	R	NM-02	Udall, Tom	D
Texas	Laredo	6	Laredo	Cuellar, Henry	D	TX-28	Cornyn, John	R
Texas	Clear Lake	6	Houston	Babin, Brian	R	TX-36	Cornyn, John	R
Texas	Channelview	6	Houston	Green, Gene	D	TX-29	Cornyn, John	R
Missouri	VERONA	07		Long, Billy	R	MO-7	McCaskill, Claire	D
Missouri	Jackson	07	Cape Girardeau, MO-IL	Smith, Jason	R	MO-8	McCaskill, Claire	D
Colorado	Lakewood	8	Denver	Perlmutter, Ed	d	CO-07	Bennet, Michael	D

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

Message

From: Madden, Joshua [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DFCB5E16E56A4858B75551A6326A0FB0-MADDEN, JOS]
Sent: 4/17/2018 5:02:28 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: file
Attachments: ADD Meeting 2018 Nata spreadsheet..xlsx

From: Parker, Cindy
Sent: Tuesday, April 17, 2018 11:53 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: file

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Madden, Joshua [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DFCB5E16E56A4858B75551A6326A0FB0-MADDEN, JOS]
Sent: 8/1/2018 12:00:48 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: Call
Attachments: Copy of NATA Priority Facilities.xlsx

Here is the sheet you asked for. Finding the risk numbers is still a little tricky.

-----Original Message-----
From: Verhalen, Frances
Sent: Tuesday, July 31, 2018 11:16 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: Call

Okay. Had to run to mtg. Need to have a current list of NATA locations and associated facilities with risk numbers for R6.

Sent from my iPhone

Message

From: Madden, Joshua [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DFCB5E16E56A4858B75551A6326A0FB0-MADDEN, JOS]
Sent: 11/8/2017 7:43:15 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: Toy drive info, and your input needed
Attachments: Priority Facilities Sheet..xlsx

Here's the sheet that I put together take a look and see if I need to add anything else to it. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Parker, Cindy
Sent: Wednesday, November 08, 2017 11:32 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Toy drive info, and your input needed

☺ haha.
Go slow on the head banging – you've got a long career of quagmires in front of you!!
Thank you!
I'll work on the bullet text for Guy. Maybe ask Janice to look for Xerox paper boxes, too? we'll need them to get set up tomorrow.
Mike will have the flyer done soon and I'll send it around.

From: Madden, Joshua
Sent: Wednesday, November 08, 2017 11:27 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Toy drive info, and your input needed

Sorry it's taken me so long to get back to you, this mother Trucking NATTS thing has sucked me into another quagmire. Is this some sort of test that Fran is doing on me? See how many big ticket items on person can take? (Denka, NATA, Air Toxics, now NATTS). Just kidding I'm fine with it. So for number 1:

1. I'll get to work on the spreadsheet like we talked about yesterday. As far as chemical properties of EtO I would say just the basics that we can pull from the EtO website that we have used in the past and maybe the fact that we know it is a component of antifreeze.
2. I'll do my best to look for boxes.
3. I'll work on the Angel Tree signs for ya. I'll send you a printers proof before I print them for your approval.

Anything else please let me know, I will be violently banging my head against my desk to knock some common sense into me. Talk to you later.

From: Parker, Cindy
Sent: Wednesday, November 08, 2017 9:57 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Toy drive info, and your input needed

Yuck.
Here's what I need help with today:

1)briefing sheet for tomorrow. I'm going to start on bullets for the briefing sheet; will you do the spreadsheet portion? How much info should we need to include on the chemical properties of EtO?

2)scrounging up zerox paper boxes.

3)big boxes for the random gifts. Years past, we've used big boxes covered in Christmas wrapping paper; Janice said she thought they got thrown away? I've asked Debra if they have any.

4)adding Multimedia Division to the directional Angel Tree signs. Can you do this? The printer in the room beside my cube prints color, and we can print them there.

5)i don't know what else.

From: Madden, Joshua
Sent: Wednesday, November 08, 2017 9:29 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Toy drive info, and your input needed

Yep I'm working

From: Parker, Cindy
Sent: Wednesday, November 08, 2017 9:05 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: Toy drive info, and your input needed

Fyi.
Can you find some empty Xerox paper boxes? Janice might can help, she's good at scrounging!
Melissa is going to take the angel cards and make a master list.
I'll call you soon; are you working today?

From: Smith, Melissa
Sent: Wednesday, November 08, 2017 8:56 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Toy drive info, and your input needed

Great! No problem. I'm headed into a section meeting, but will take care of it after.

Melissa Smith, Chief
Program Support Section (6MM-RS)
Multimedia Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave
Dallas, TX 75202
214-665-7357
smith.melissa@epa.gov

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From: Parker, Cindy
Sent: Wednesday, November 08, 2017 8:50 AM

To: Smith, Melissa <Smith.Melissa@epa.gov>
Subject: RE: Toy drive info, and your input needed

Ohh, thank you! I just have to get this briefing paper done; I knew I needed to be in the office to get the angels done, but I just couldn't. I've done nothing but this for the last 4 days. And we're so much better off than the CFC campaign. They're both a mess this year.

I will be in tomorrow and can help set up the Front Office, too.

If you don't mind doing the master list, that would be great. The cards for angels have a serial number on them, and that's what we need to record. The Forgottens don't have a name, they are for homeless centers, etc, apparently. Recommend looking what Rachel and Debra have done on 9, it really gelled for me when I saw their set up. Fran recommended adding a sticky note pad to the set up, so folks can write down what they're signing up for, so we will add that.
I think the master list needs to show serial number, which floor/contact it was distributed to. And then when completed, we can cross it off. And add others as we get them. For the Forgottens, maybe just 'male 14-24'? I glanced at them, but not closely. I don't know how many of each category we have. Maybe you can find something on the cards without a serial number that will help us track them?
They are in my lateral above my phone, and it is not locked. My cube is on 11th floor. If you go down the stairs on the gym side, and make a left, my cube is the first one on your right. I'm over in the corner by Karen McCormick's office and the Gulf of Mexico conf room, if that helps. I think I'm in 11.017, but not positive!
There are a few extra red bags, if any of our cards don't have them.
Thank you. Whew, a sigh of relief. Thank you.

From: Smith, Melissa
Sent: Wednesday, November 08, 2017 8:33 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Toy drive info, and your input needed

I'm here and can help with anything that needs to be done today (like creating the master list), and can help set up Tomika's area tomorrow.

Melissa Smith, Chief
Program Support Section (6MM-RS)
Multimedia Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave
Dallas, TX 75202
214-665-7357
smith.melissa@epa.gov

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From: Parker, Cindy
Sent: Wednesday, November 08, 2017 8:29 AM
To: McGee, Tomika <McGee.Tomika@epa.gov>; Smith, Melissa <Smith.Melissa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Toy drive info, and your input needed

I was going for 8:30 – tomorrow morning. I am flexing today. I know its inconvenient, but I have to write a briefing paper for tomorrow morning at 9, and I haven't been able to get it done in the office!!
Let me see if Josh and I, and maybe Melissa, can get the area set up tomorrow morning or at lunch; I'll touch base with them. At least get set up and started, you can refine and decorate better on Monday? Can you find some Xerox paper boxes?
The angels are in my lateral, but not yet ready to distribute. Could possibly get them to you today, would you prefer that? Need to get someone to prepare a master list of what we've been assigned before distribution. I just didn't have time yesterday I picked them up after 4:00pm.
Let me coordinate a bit and see what we can do.

From: McGee, Tomika
Sent: Wednesday, November 08, 2017 8:24 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Smith, Melissa <Smith.Melissa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Toy drive info, and your input needed

HI Cindy,

Depending on what time you're scheduling the meeting, we can use Wren's conference room. I think I like the scratch off better than the tabs. Also, just fyi, I'm in the office today until 12:45 and then out till Monday. If need be, I can meet with you individually and get my angels to post, etc…

From: Parker, Cindy
Sent: Wednesday, November 08, 2017 8:04 AM
To: Smith, Melissa <Smith.Melissa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McGee, Tomika <McGee.Tomika@epa.gov>
Subject: RE: Toy drive info, and your input needed

Another note – I'm adding 6MM to the flyers, so for those of us on floors with other divisions, our division folks can find their way to our angels. Melissa, I spoke with Lorena Vaughn yesterday, she's doing Regional Counsel's and will keep their stuff on the other side of the floor, so it shouldn't be a problem for you. But it will be important for 7th floor and 11th floor. We can add 6MM or Multimedia Division, or something like that to the directional signs, if you want.

From: Parker, Cindy
Sent: Wednesday, November 08, 2017 8:00 AM
To: Smith, Melissa <Smith.Melissa@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McGee, Tomika <McGee.Tomika@epa.gov>
Subject: Toy drive info, and your input needed

Everyone,
I've received our angels – I'll schedule a quick meeting tomorrow to hand them out to all.

FYI – Rachel Matthews, one of the regional coordinators from EN, has one of their areas set up on the 9th floor – stop by and take a look, if you can – it's in a half-cube area at the end of the hallway near the women's restroom. The red bags for the toy items fit nicely into a Xerox paper box, so if you get a chance today, try to scrounge up as many as you can find. Of course, the other division Toy Drive contacts are doing the same, so they may be hard to find! We got a nice mix of categories, just like we asked for.

One question for you: note the file attached 'sample AT tag display'. Instead of doing pull tabs like our Ads asked us to, the Enforcement Division is doing a list and people can just scratch off what item they choose to purchase for an angel. EN has these forms hanging up, with an ink pen attached. On the 11th floor, we are using a substandard cube, and I believe 13th floor is also using a cube as well. Tell me what you think – are the scratch offs ok to use, or do you think we

need to use the pull tabs? Both will satisfy the need to NOT have a person's name hanging on the wall. ***Let me know what you think about using the scratch off instead of the pull tab.***

For the signage – Mike Adams has drafted a flyer for us; I'm getting him corrections today and can print tomorrow, and will send file in case you want to print more, too. Directional signs above can be printed, too – if you don't have easy access to a color printer – they are few – let me know, I have one close by.

A few more specific instructions, and I'll go over them tomorrow. Shouldn't take but a few minutes – less than 30 minutes. I'll find a room and send invites.
Oh, James McDonald wishes for the CFC Campaign and the Toy Drive Campaign to join forces and host a regional office chili cookoff. I went to a meeting yesterday to begin discussing. If you'd like to represent MM Division and help organize a regional chili cookoff, let me know. I believe the date discussed was Nov 28. No money can be involved, so not sure how they will finance the costs of cups, bowls, spoons, etc. That's one of the details to be worked out. They also talked about a division competition for chili chefs. Again, if you'd like to be involved in organizing, let me know.
Thank you for jumping in to help with this year's Toy Drive – an Angel will appreciate your efforts on Christmas morning!
Cindy

From: Pandak, Debra
Sent: Tuesday, November 07, 2017 4:20 PM
To: Bonnell, Corey <bonnell.corey@epa.gov>; Gomez, Salina <Gomez.Salina@epa.gov>; Little, Bill <Little.Bill@epa.gov>; Mason, Steve <mason.steve@epa.gov>; Matthews, Rachel <Matthews.Rachel@epa.gov>; McKinney, Jason <McKinney.Jason@epa.gov>; Nelson, Nina <Nelson.Nina@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Pereira, Stephen <pereira.stephen@epa.gov>; Rathbone, Rachel <Rathbone.Rachel@epa.gov>; Taylor, Andrew <Taylor.Andrew@epa.gov>; Vaughn, Lorena <Vaughn.Lorena@epa.gov>; Ward, Misty <ward.misty@epa.gov>
Subject: Templates

Here are some additional examples. Feel free to be creative.

EN is using the Angel Stop signs to direct folks to the areas where we have the Angel Tree displays.

Debra Pandak (6EN-H2)
U.S. EPA Region 6
1445 Ross Ave. Ste. 1200
Dallas, TX 75202
Phone: 214-665-7565

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Message

From: Madden, Joshua [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DFCB5E16E56A4858B75551A6326A0FB0-MADDEN, JOS]
Sent: 10/3/2017 7:32:19 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: Phone call follow up
Attachments: AR NATA 2014 view 2 update.xlsx

Here you go this is what I could find. The Hydrazine is still high, but lion oil doesn't look bad, unless there has been a change that we don't know about.

From: Parker, Cindy
Sent: Tuesday, October 03, 2017 12:39 PM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Phone call follow up

Thank you.

From: Madden, Joshua
Sent: Tuesday, October 03, 2017 12:39 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Phone call follow up

I guess so. I'll look through our other spreadsheets and the NATA website and see what I can find

---

From: Parker, Cindy
Sent: Tuesday, October 03, 2017 12:36 PM
To: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Phone call follow up

I guess we'd best pull a spreadsheet with them included, just in case questions come up. I mean, if HQ is tracking them, and verifying their info, we may be having facility conversations with them....what do you think?

From: Madden, Joshua
Sent: Tuesday, October 03, 2017 12:11 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: RE: Phone call follow up

Greeeaaattt. I actually thought that Clean Harbors had been cleared, but I guess not.

From: Parker, Cindy
Sent: Tuesday, October 03, 2017 11:55 AM
To: Madden, Joshua <madden.joshua@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: Phone call follow up

Fyi – we have been focusing just on EtO. OAQPS is also looking at the 3 facilities in AR – Lion Oil popped for benzene. Great Lakes and Clean Harbors popped for hydrazine.
Cindy

From: Lavoie, Tegan
Sent: Tuesday, October 03, 2017 11:39 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: Phone call follow up

Hi Cindy,

Thanks for your help on the phone today. We think we are looking for the Title V permit applications, but I think in some cases the NSR Permit applications may contain what we need. To explain, we're looking for release parameter information for the different release points at each facility. We need details like stack height, stack diameter, stack temperature, stack flow rate, stack velocity, latitude and longitude of each release point, and process level emissions in tons. I appreciate your help in obtaining any documents which contain this level of detail.

Site Name	Street Address	City	County	State
LION OIL COMPANY	1000 MCHENRY DRIVE	EL DORADO	Union	Arkansas
CLEAN HARBORS EL DORADO, LLC	309 AMERICAN CIRCLE	EL DORADO	Union	Arkansas
GREAT LAKES CHEMICAL-EL DORADO	2226 HAYNESVILLE HWY	EL DORADO	Union	Arkansas
SHELL TECHNOLOGY CENTER HOUSTON	3333 HWY 6 SOUTH	HOUSTON	Harris	Texas
CLEAR LAKE PLANT	9502 BAYPORT BLVD	PASADENA	Harris	Texas
HOUSTON PLANT	15200 ALMEDA RD	HOUSTON	Fort Bend	Texas
BAYTOWN REFINERY	2800 DECKER DR	BAYTOWN	Harris	Texas
BAYPORT UNDERWOOD PLANT	5761 UNDERWOOD RD	PASADENA	Harris	Texas
CHANNELVIEW PLANT	2502 SHELDON RD	CHANNELVIEW	Harris	Texas
TEXAS OPERATIONS	HWY 149 KODAK BLVD	LONGVIEW	Harrison	Texas
PORT NECHES PLANT	2102 SPUR 136	PORT NECHES	Jefferson	Texas
CONROE FACILITY	5451 JEFFERSON CHEMICAL RD	CONROE	Montgomery	Texas
SEADRIFT PLANT	HIGHWAY 185	SEADRIFT	Calhoun	Texas

If you have any questions, please let me know. Thanks in advance and have a great day.

Best regards,
Tegan

Tegan N. Lavoie, PhD | Physical Scientist
OAR/OAQPS/SPPD/Refining and Chemicals Group
U.S. Environmental Protection Agency
109 TW Alexander Drive, Office: E142G, MC:E143-01
Research Triangle Park, NC 27711
Phone: (919) 541-5110 | Email: lavoie.tegan@epa.gov

Message

From: Madden, Joshua [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DFCB5E16E56A4858B75551A6326A0FB0-MADDEN, JOS]
Sent: 6/28/2018 3:58:29 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: EtO emission numbers
Attachments: Nata EtO facilities map.pptx

FYI I put together a new map with Mike's input. I haven't sent it up yet because no one has asked for a new map yet. I think I will keep it till someone ask for a new map. That way I'm not scrabbling to fix a map or make a new one.

From: Parker, Cindy
Sent: Thursday, June 28, 2018 10:55 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Good Morning, Darcie,

I'm just checking with you to see if there is an official NATA update that's been issued yet? All we've heard is the informal information sent to our Air Enforcement Section Chief Darrin Larson (see below;)
I feel like we should be doing something, and instead, we're waiting? We are trying to pull together maps showing these facilities, but I'm also guessing the professional map-makers there, probably already have detailed graphics?
Was something else sent out and did we miss it?
Thank you,
Cindy Parker

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:25 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: EtO emission numbers

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Friday, June 22, 2018 9:23 AM
To: David Gray <gray.david@epa.gov>; Cheryl Seager <Seager.Cheryl@epa.gov>; Stenger, Wren <stenger.wren@epa.gov>
Cc: Stephen Gilrein <Gilrein.Stephen@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>; Steve Thompson <thompson.steve@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: EtO emission numbers

Robin Langdon of OAQPS called me after our conf. call yesterday, to discuss when OAQPS could provide us with the latest emission data for the 9 facilities on the slides OAQPS shared with us during the June 14 briefing. She said they need to brief Wehrum prior to sharing the latest information (risk numbers, etc.), but agreed to provide us the emission numbers on Monday. We can share the emissions data with the states, but she asked that EPA and the states hold off on reaching out to the facilities using this newest data until after the Wehrum briefing, which is set for next Wednesday.

Here is the current list of 9 EtO facilities:

Union Carbide Corp - St Charles Operations (Dow Chem.)	Louisiana
Port Neches Plant (Huntsman Corp.)	Texas
Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana
Shell Technology Center Houston	Texas
BCP Ingredients Inc (Balchem Co.)	Louisiana
Taminco US Inc (Eastman Chemical Co.)	Louisiana
Santa Teresa Facility (Sterigenics)	New Mexico
Midwest Sterilization Corp	Texas
Texas Operations (Eastman Chemical Co.)	Texas

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Madden, Joshua [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DFCB5E16E56A4858B75551A6326A0FB0-MADDEN, JOS]
Sent: 12/6/2017 6:12:49 PM
To: Parker, Cindy [parker.cindy@epa.gov]
Subject: RE: Call in for EtO briefing for Wren - at 11:30, we'll call from Edwards Aquifer room
Attachments: Priority Facilities Sheet Dec 05 2017.xlsx; Priority Facilities.docx

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From: Parker, Cindy
Sent: Wednesday, December 06, 2017 11:16 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: Call in for EtO briefing for Wren - at 11:30, we'll call from Edwards Aquifer room

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From: Verhalen, Frances
Sent: Wednesday, December 06, 2017 11:02 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: Call in for EtO briefing for Wren
Importance: High

Can you call me on my line (214-665-2172) from the conference room? I think I will be the only one on the call other than ya'll.

Thanks

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 6/27/2017 11:57:36 PM
To: Danielle Nesvacil [danielle.nesvacil@tceq.texas.gov]
CC: Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Adam Bullock [adam.bullock@tceq.texas.gov]
Subject: RE: NATA Review

Danielle

I made the benzidine change. I will tagged out the benzidine data in the 2014 NEI v1 so that it will not be used in the v2. Here is my tagging comment: **"NATA Change-per Brenda Shine, stack test was below detection and 1/2 detection limit was used. Agreed on by Danielle Nesvacil <danielle.nesvacil@tceq.texas.gov> "**

Nonpoint and comments on the v1 tract risks are due Aug 11. EtO was due June 1 but I still need your review on the "priority" facilities – as soon as possible. Since we still have a few outstanding facilities (Texas EtO) that have not yet been reviewed, we developed a priority list of point sources and I put them on the SharePoint site (they are in the data library-- https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014%20NATA-%20Tract%20Risk%20Review/Data/Priorty%20Facility%20List%20-based%20on%20tract%20risk.xlsx?d=wf75d0016720b45deac34508675f6f362). I've asked Cindy about them but I know she is out of the office so I put them in the earlier email I sent to you.

Please let me know if you have EtO changes for these high priority facilities as soon as possible since I need to finish up the point changes for the NEI v2.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Danielle Nesvacil [mailto:danielle.nesvacil@tceq.texas.gov]
Sent: Tuesday, June 27, 2017 5:49 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Adam Bullock <adam.bullock@tceq.texas.gov>
Subject: Re: NATA Review

HI Madeleine--

Thanks for your email. I don't have access to change those emissions in EIS, I need to work with our database administrator, Adam Bullock (cc'd), to accomplish that. We'll start looking into it ASAP and keep you updated.

I was under the impression that the EtO revisions were due Aug 11-- am I way off base? I'm still working these due to covering for co-workers who are out for various reasons.

Let me know if you need anything from me sooner related to either of the above issues or another issue.

Thanks,
Danielle

From: Strum, Madeleine <Strum.Madeleine@epa.gov>
Sent: Tuesday, June 27, 2017 1:55 PM
To: Danielle Nesvacil
Cc: Parker, Cindy; Madden, Joshua
Subject: FW: NATA Review

Hi Danielle
Per the below the engineers working on rules indicate that the benzidine emissions were based on ½ the Detection Limit. Therefore I propose to remove them. Could you remove from your database?

The other priority facilities that we haven't heard back from you are below. Had you gotten back with Cindy or Joshua on these?

State	EPA Region	County	FIPS	Tract	Population	TRACT PT-StationaryPoint Cancer Risk (per million)	Driver Facility	State Reviewed Data? (Y/N) 5/15/17 version	Change Submitted ? (Y/N)	NOTES	State or Tribe	FIPS	County	EIS
TX	EPA Region 6	Jefferson	48245	48245010902	4592	237.754	4945211				Texas	48245	Jefferson	49
TX	EPA Region 6	Harrison	48203	48203020604	3622	135.344	4941511				Texas	48203	Harrison	49
TX	EPA Region 6	Harris	48201	48201451700	3407	75	3736811				Texas	48201	Harris	37
TX	EPA Region 6	Harris	48201	48201451700	3407	75	4057911				Texas	48201	Harris	40
TX	EPA Region 6	Harris	48201	48201451700	3407	75	4941411				Texas	48201	Harris	49

Thanks

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Palma, Ted
Sent: Tuesday, June 27, 2017 10:03 AM
To: Shrager, Brian <Shrager.Brian@epa.gov>; Shine, Brenda <Shine.Brenda@epa.gov>
Cc: Bouchard, Andrew <Bouchard.Andrew@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: NATA Review

Makes perfect sense to remove the benzidine for this facility. I will have Madeline work with TX to have it removed from there NEI V2 and thus remove it from the public release of NATA
Ted

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Shrager, Brian
Sent: Friday, June 16, 2017 9:10 AM
To: Shine, Brenda <Shine.Brenda@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Bouchard, Andrew <Bouchard.Andrew@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>
Subject: RE: NATA Review

With all tests being BDL, at least within EPA programs that I've worked on (emission factors, inventories, and reg. development), we set those emissions at zero since there is no indication that the pollutant is emitted. I think it is worth the NATA checking in with Texas regarding these emissions, but perhaps this issue is already being vetted? Ted?

Stepping back, the issue with NATA is that the emissions are being reported to NEI by the states, and their conventions may not match ours. The good news is that we have a NATA review process before NATA is released, and issues such as this will hopefully be identified. To the extent that a number that is based on a non-detect ends up being of consequence, the review process is designed to dig deeper to see if risks identified are real or not.

I think Ted may be gone for the next week or so, so we may have to wait until the week after next for resolution.

Thanks!

Brian

From: Shine, Brenda
Sent: Friday, June 16, 2017 8:40 AM
To: Shrager, Brian <Shrager.Brian@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>

Cc: Bouchard, Andrew <Bouchard.Andrew@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>
Subject: FW: NATA Review

Hi Guys—

Just wanted to make you aware of what Im seeing in the NATA v1 results—having recently done the Refinery RTR, I was interested in how the NATA results would compare; further, as part of our groups QA of emission data for the chemical sector source categories, many of which are collocated at Refineries, had access to the disaggregated NATA risk results where I found some refineries that were considerably over 100/million; the highest was ExxonMobil in Baytown,Tx, which wouldn't surprise anyone, but most of the risk, 343/410, in a million was attributed to benzidine from fugitive or miscellaneous sources;

The benzidine was in the inventory based on stack tests from the 2011 ICR that were **below the method detection limit** for benzidine but being conservative they reported levels of benzidine at half the detection limit.

We decided in the Refinery RTR process not to model pollutants that were BDL if they were not present in any tests above BDL. I had several conversations with Brian about this but it seems like this issue probably won't go away and I wonder if we could make sure our policy is sound and consistent on how we treat highly toxic compounds flagged below detection. I think Andrew is also asking similar questions in Ethylene. I wonder because it seems like the convention for inventories and reporting may be different than the convention for risk modeling.

So bottom line, are you guys aware of a definite policy with respect to the treatment of highly toxic compounds that are shown to be BDL or can we at least make sure we're on the same page.

From: Jones, John-L
Sent: Thursday, June 15, 2017 2:57 PM
To: Shine, Brenda <Shine.Brenda@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: NATA Review

The company is tracking down the details but the sources (that were tested) are most likely: the DCU (delayed Coker unit) and the SCU (Sulfur conversion complex) which is what EM calls the sulfur recovery unit/plant.

I will let you know as soon as they get back to me with more information.

John L. Jones
Air Enforcement Section
6EN-AA
214-665-7233

From: Shine, Brenda
Sent: Thursday, June 15, 2017 1:06 PM
To: Jones, John-L <jones.john-l@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: NATA Review

But it's not being reported from a source that was stack tested; it is reported as a fugitive/miscellaneous source. Can she tell us what source they stack tested?

From: Jones, John-L
Sent: Thursday, June 15, 2017 1:55 PM
To: Shine, Brenda <Shine.Brenda@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: NATA Review

Hi Brenda:

After you told me where to look, I cut a portion of the NATA report and sent it to Diane Otto at EM Baytown; that helped her track down the source of the benzidine data used in the emission number.

The benzidine data comes from the second stage to the 2011 ICR (as Diane calls it the 114 from OAQPS); it's the result from follow-up testing EM did as part of the questions in the ICR.

Their testing data results were **below the method detection limit** for benzidine but being conservative they reported levels of benzidine at half the detection limit.

I hope this is helpful.

John L. Jones
Air Enforcement Section
6EN-AA
214-665-7233

From: Shine, Brenda
Sent: Thursday, June 15, 2017 10:32 AM
To: Jones, John-L <jones.john-l@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: NATA Review

This is the NATA run, so I believe it came from the national emission inventory v1 and not a response to a 114. It was not in the Refinery ICR 114 conducted in 2011. Ted can verify but he may be out today. It might have to wait until he comes back.

From: Jones, John-L
Sent: Thursday, June 15, 2017 11:29 AM
To: Shine, Brenda <Shine.Brenda@epa.gov>
Subject: FW: NATA Review

Hi Brenda:

I was asked to look at the benzidine issue (raised in your email below) at ExxonMobil Baytown. I spoke to Diane Otto at the refinery to see if she could shed some light on the source(s). Diane is looking into it now. Based on my conversation with her it would be helpful for me to have the source document for the benzidine fugitive emissions; e.g. was it an emission inventory or a response to a 114?
Additionally I was thinking that it may be originating at the olefins plant at the ExxonMobil Chemical Plant with is part of the Baytown complex.

John L. Jones
Air Enforcement Section

6EN-AA
214-665-7233

From: Jones, John-L
Sent: Thursday, June 15, 2017 9:41 AM
To: Osbourne, Margaret <osbourne.margaret@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: RE: NATA Review

Hi Margaret:

I spoke to Diane Otto at the ExxonMobil Refinery in Baytown. She will try to find out where the benzidine reporting is coming from. It could be the refinery or the Chemical Plant ?; or is RTP positive it's from the refinery?

It would be helpful if we had the document that RTP is using as a basis.

John L. Jones
Air Enforcement Section
6EN-AA
214-665-7233

From: Osbourne, Margaret
Sent: Wednesday, June 14, 2017 4:25 PM
To: Jones, John-L <jones.john-l@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: NATA Review

Hi John:

Can we talk about this tomorrow? With your expertise in the R6 refineries, I thought you may have an idea of the benzidine at ExMob Baytown – see emails below.

Thanks,
Margaret

Margaret Osbourne
Chief, Air Toxics Enforcement Section
Compliance Assurance & Enforcement Division
EPA Region 6
1445 Ross Avenue (6EN-AT)
Dallas, TX 75202
214-665-6508

From: Verhalen, Frances
Sent: Wednesday, June 14, 2017 1:30 PM
To: Osbourne, Margaret <osbourne.margaret@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: NATA Review

Margaret, as we discussed, I will ask Cindy to coordinate information transfer with you and you will share it with Darrin and assigned staff.

Below is the note from Brenda Shine about the benzidine at ExxonMobil Baytown. Cindy or Josh can coordinate with TCEQ to confirm the reality of the emission but I would appreciate some assistance in understanding the likely sources for this.

Thank you.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Shine, Brenda
Sent: Wednesday, June 14, 2017 12:56 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: NATA Review

Hello Frances,

I was looking at some of the NATAv1 information and I noticed that one refinery (Exxon Mobil, Baytown, Texas) had a particularly high risk value (410 in a million)—of which 343/410 --- 84% of the high MIR is attributed to benzidine from fugitive or miscellaneous sources; I worked on the recently completed Refinery RTTR and I know that there was no benzidine reported from this facility during the refinery RTR process or the 2011 information collection request. Further, we tested for it from cat crackers and found all results below detection; I'd like to flag this value for you as you work with states to conduct the NATA review to see if it is real. I can tell you that one facility reported benzidine in the 2011 ICR (Exxon Baton Rouge) from catalytic reformer vent. Although we modeled this emission, we also tested for it in catalytic reformers and also found it to be below detection limits.

Thanks. If you have any questions let me know. I'm at 919 541 3608.

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 7/5/2017 4:47:33 PM
To: Kelly.Petersen@LA.gov
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Maureen Ducote [Maureen.Ducote@la.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: ethylene oxide emissions - NATA review
Attachments: 2ethyleneoxidefacilities.xlsx

Hi Kelly
There are 2 more facilities (listed below) that I don't have a record of your reviewing. Can you let me know if these emissions (columns highlighted in yellow) are correct? These facilities cause the tract risk to exceed 100 in a million:

Note that details on the process/release point (modeling file) ethylene oxide emissions are attached.

Thanks!!!

State	EPA Region	County	FIPS	Tract	Population	TRACT PT-StationaryPoint Cancer Risk (per million)	Driver Facility	State Reviewed Data? (Y/N) 5/15/17 version	Change Submitted ? (Y/N)	NOTES	State or Tribe	FI
LA	EPA Region 6	Ascension	22005	22005030300	13728	97.828	7445611				Louisiana	225
LA	EPA Region 6	Iberville	22047	22047953102	2449	95	8467311				Louisiana	227

Madeleine Strum|U.S. Environmental Protection Agency|109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Kelly Petersen [mailto:Kelly.Petersen@LA.GOV]
Sent: Tuesday, March 21, 2017 5:16 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>

Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Maureen Ducote <Maureen.Ducote@la.gov>
Subject: RE: ethylene oxide emissions - NATA review

Madeleine,
I reviewed these emissions and they are all below the permitted limit, so I have no reason to doubt their validity. See the updates to the chart below.

Thanks,
Kelly Petersen
Air Planning and Assessment Division
Louisiana Department of Environmental Quality
Phone: (225) 219-3397 Fax: (225) 325-8141 kelly.petersen@la.gov

---

From: Strum, Madeleine [mailto:Strum.Madeleine@epa.gov]
Sent: Tuesday, March 21, 2017 7:45 AM
To: Kelly Petersen
Cc: Verhalen, Frances; Palma, Ted; Smith, Darcie
Subject: ethylene oxide emissions - NATA review

Hi Kelly,

A number of Louisiana facilities have ethylene oxide (EtO) emission estimates that could result in highly elevated tract risks. As we indicated in our January 2014 NATA modeling update (email from Sally Dombrowski 1/27/2017), the cancer health benchmark for Ethylene Oxide (EtO) was updated by EPA in December 2016 (https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025) and cancer risk levels for this pollutant are approximately 50 times higher.

In terms of annual emissions, the largest is Union Carbide, at about 15 tons EO emissions.

State or Tribe	FIPS	County	EIS facility_id	agy_facility_id	facility_name
Louisiana	22089	St. Charles	7202911	2083	Union Carbide Operations
Louisiana	22047	Iberville	7451011	27495	BCP Ingredien Inc
Louisiana	22047	Iberville	5504811	3263	Taminco US Inc
Louisiana	22095	St. John the Baptist	5287111	13560	Air Products P Manufacturing Plant
Louisiana	22005	Ascension	8465611	2049	BASF Corp - Ge Site
Louisiana	22019	Calcasieu	8468011	3271	Sasol Chemica Charles Chemi

These (along with a few others)are all on the "Jan2017 Update" of the SharePoint check list
https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/Data/CheckList/checklist.xlsx?d=w276998ab32364c90a67e05342b2904ac

Have you verified the emissions and release parameters for these facilities?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711

Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 4/20/2017 6:43:15 PM
To: Parker, Cindy [parker.cindy@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
CC: Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: NATA reviews

https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/Data/Forms/AllItems.aspx

go to the folder "January 2017 Updates"

Note that the each pollutant is the same ratio – December/September but it may not be 56 because in addition to the EtO risk change, we updated the MET data which could have impacted the modeled concentrations/risk results.

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Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Parker, Cindy
Sent: Thursday, April 20, 2017 2:36 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA reviews

Thanks, Darcie.

From: Smith, Darcie
Sent: Thursday, April 20, 2017 1:36 PM
To: Parker, Cindy <parker.cindy@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA reviews

Hi Cindy –

I'm forwarding your note to Madeleine. She can point you to exactly where you need to look.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Parker, Cindy
Sent: Thursday, April 20, 2017 12:38 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: NATA reviews

Darcie,
Can you send me the link to the December data, please?
Thanks,
Cindy

From: Verhalen, Frances
Sent: Wednesday, April 05, 2017 1:20 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Subject: RE: NATA reviews

Darcie,
In looking at the numbers, it does not appear that there is a linear connection between the September and December cancer risk calculations – and there should be, if the only adjustment was the risk factor (x56). I am confused. Can you explain?

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From: Smith, Darcie
Sent: Wednesday, April 05, 2017 9:34 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA reviews

Hi Fran –

In December 2016, IRIS released a new URE for ethylene oxide that was 56 times more potent. We went ahead and included the value in our most recent round of point source modeling from December so that you guys would have time to review the results. Here's a link to the IRIS assessment, if you're interested: https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025

Madeleine has contacted LA about the Union Carbide facility, and a few others, and they have said they reviewed them and don't have any changes to the emissions. I'll forward you that email exchange.

As for risks, you want to be sure that you're also reviewing the files from December as that's where the EtO risks show up. For example, for the Union Carbide facility, it isn't 22 in 1 million, but rather 1766 in 1 million. (Sorry for the bad news!) I've pasted below the top facilities in LA.

Please feel free to contact Ted at (919) 541-5470 for additional information about risks at R6 facilities or contact any of us with additional questions.

Thanks,
Darcie

State or Tribe	FIPs	Facility Name	Facility NEI ID	Cancer Risk 2014 (December 2016 Analysis) (in a million)	Cancer Risk 2014 (September 2016 Analysis) (in a million)
LA	22047	BCP Ingredients Inc	7451011	2254.996	10.182
LA	22095	E I DuPont de Nemours & Co - Pontchartrain Site	8026611	2004.231	1572.185
LA	22089	Union Carbide Corp - St Charles Operations	7202911	1766.916	22.492
LA	22047	Taminco US Inc	5504811	1105.059	7.065
LA	22095	Air Products Performance Manufacturing Inc - Reserve Plant	5287111	713.679	10.493
LA	22019	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	8468011	680.012	14.031
LA	22057	Thoma-Sea Marine Constructors LLC - Lockport Yard	5539911	533.960	453.138
LA	22005	Shell Chemical LP - Geismar Plant	7445611	473.742	8.102
LA	22101	CAMERON INTERNATIONAL CORP	16723111	450.624	336.268
LA	22005	BASF Corp - Geismar Site	8465611	317.639	32.325
LA	22047	The Dow Chemical Co - Louisiana Operations	8467311	192.983	31.983

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Verhalen, Frances
Sent: Wednesday, April 05, 2017 10:01 AM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: NATA reviews

We are starting the NATA data reviews (rebuilding institutional knowledge). And there is discussion about ethylene oxide.

What change in risk evaluation has occurred that is causing EtOx to pop? I have attached what we think is the facility with the highest emission for R6, and in LA near LaPlace.

My staff and I are playing catch up and appreciate your assistance in educating us on this topic.

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Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 5/16/2017 12:47:08 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: emissions and release point changes - follow up

Fyi.

From: NATA
Sent: Tuesday, May 16, 2017 7:31 AM
To: 'Danielle Nesvacil' <danielle.nesvacil@tceq.texas.gov>; NATA <NATA@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Kevin Cauble <kevin.cauble@tceq.texas.gov>
Subject: RE: emissions and release point changes - follow up

Danielle,
Thanks for sending this. I am very close to implementing these changes -- I just have a few questions – sorry about not asking these earlier.

1. For

Texas	48439	Tarrant	17086911	MOSIER VALLEY COMPRESSOR STATOLN

In particular,

agy_facility_id	unit_id	process_id	agy_unit_id	agy_process_id
1747	113029013	159869014	000005	000005

The VOC changed from 5.0703 tons to 0.0004 tons but the HAP VOC for many HAPs far exceeds that. For example: methanol is 0.0027 tons, acetaldehyde is 0.0091 tons, xylenes is 0.00889 tons hexane is 0.0012 tons, acrolein is 0.0056 tons and naphthalene is 0.003595 tons. It also doesn't make sense to have 0 benzene and 0 toluene yet nonzero values of the more trace HAPs that are emitted from that SCC such as tetrachloroethylene, vinyl chloride, biphenyl, ethyl benzene, 1,3 butadiene, etc.

Same issue for the below unit/process -- where VOC is changed to 0.0603 but HAP VOC far exceed that (formaldehyde is 0.5159) .

agy_facility_id	unit_id	process_id	agy_unit_id	agy_process_id
1747	113028913	159868914	000004	000004

2. For the hexavalent chromium change--

State or Tribe	FIPS	county	facility_id	facility name
Texas	48113	Dallas	4899011	MARSHALL STREET FACILITY

You have a change to hexavalent chromium should I also adjust trivalent? Was total chromium tested and I apply the same speciation factor or was hexavalent tested and you have no value for trivalent?

Same question for

State or Tribe	FIPS	county	facility_id	facility name
Texas	48309	McLennan	6892011	Precise Hard Chrome

Thanks much!

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Danielle Nesvacil [mailto:danielle.nesvacil@tceq.texas.gov]
Sent: Monday, May 15, 2017 6:22 PM
To: NATA <NATA@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Kevin Cauble <kevin.cauble@tceq.texas.gov>
Subject: Re: emissions and release point changes - follow up

Madeleine,

I apologize for the delay. Please see the attached and let me know if you have any questions/comments/concerns.

I highlighted the updates/new comments in an orange color so you could tell them from the original change sheet.

I really appreciate your help on this.

Regards,
Danielle

From: NATA <NATA@epa.gov>
Sent: Monday, May 15, 2017 6:44 AM
To: Danielle Nesvacil
Cc: Parker, Cindy
Subject: FW: emissions and release point changes - follow up

Hi Danielle,
Can you send me the updated sheet with the few items we discussed last Monday?

Thanks

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: NATA
Sent: Saturday, May 06, 2017 10:45 PM
To: Danielle Nesvacil <danielle.nesvacil@tceq.texas.gov>; NATA <NATA@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>
Subject: emissions and release point changes - follow up

Hi Danielle
Sorry for not getting back to you as fast on this one – I was sick a few days last week and now pretty overloaded between the EIS submissions and change sheets to process.

I appreciate your efforts in consolidating the change sheets and also for taking the time to put in the detailed helpful explanations and look into the TRI data. I do have follow up comments/questions that I've attached in the blue highlighted cells. Can we discuss these and your other questions at 11:30 central time (12:30 Eastern) on Monday? Also is part2 of 2 (i.e., the attached) the only change sheet I need to process? Also on the release point change sheet are there just the 2 release points from the below facility that need to be changed and can we work through what that change should be?

State or Tribe	region_cd	county	facility_id	facility name
Texas	48201	Harris	4167011	CB&I HOUSTON PLANT
Texas	48201	Harris	4167011	CB&I HOUSTON PLANT

Thanks and looking forward to hearing from you Monday.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Danielle Nesvacil [mailto:danielle.nesvacil@tceq.texas.gov]
Sent: Tuesday, May 02, 2017 6:24 PM
To: NATA <NATA@epa.gov>
Subject: RE: Texas Priority Facility Check List

Thank you so much for the quick reply.

I accidentally omitted the EtO updates in the Texas Process Change spreadsheet. I have attached a new version of this spreadsheet with the changes. We communicated these changes to Region 6 (Cindy Parker) well in advance of the deadline, but neglected to include them in the email yesterday. I sincerely apologize.

Could we talk sometime about one Texas site, Mosier Valley compressor station? The site submitted updated emissions, but the TCEQ database does ***not*** have the EIS ID entered for the generators (emissions units), and I'm having a hard time completing all of the updates for this facility. I'm not sure the best way to proceed.

Thanks so much for your patience,
Danielle

From: NATA [mailto:NATA@epa.gov]
Sent: Monday, May 01, 2017 7:09 PM
To: Danielle Nesvacil; NATA
Subject: RE: Texas Priority Facility Check List

Hi Danielle,

The risks are different because they are reflecting the 2 different modeling results – Sept 2016 vs January 2017. If the facility was in the Change sheet in Sept 2016 because it was over 10 in a million, we didn't make any changes to the change sheet, even if the risks went up in the January 2017 modeling to over 100 in million. We did make sure any facility, that based on the January 2017 modeling was greater than 100 in a million would be in the check list.

If you go to the View 1 comparison on SharePoint https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/Data/January%202017%20Updates/NATA%202014%20Point%20max%20risk%20and%20hi%20Comparison%20File%20Summary.xlsx?d=wd698831460d94a5299d9658139068f39 you will see the comparison between the Sept2016 and January 2017 results -- the change in risks were due to a change in MET data and/or the ethylene oxide unit risk estimate updated.

The reason we didn't update the process change sheet to put in the January risk information was that some states had already sent in their data based on the September 2016 review so we did not want to put in the same facility twice. In addition there were no emissions changes between Sept2016 and January2017.

If the facility was not over 10 in a million in September (so it wasn't in the change sheets in September) but changed to over 10 in a million in January then it got added to the change sheets in the https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/Data/January%202017%20Updates/NATA%202014%20Point%20max%20risk%20and%20hi%20Comparison%20File%20Summary.xlsx?d=wd698831460d94a5299d9658139068f39 folder on SharePoint.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
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Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Danielle Nesvacil [mailto:danielle.nesvacil@tceq.texas.gov]
Sent: Monday, May 01, 2017 6:43 PM
To: NATA <NATA@epa.gov>
Subject: Texas Priority Facility Check List

Hi--

For many of the sites, the facility total max cancer risk in the Texas Priority Facility Check List does *not* match the facility total risk in the Texas Process Change spreadsheet.

For example, the Priority Checklist lists a facility total max cancer risk of 1316.24 for "TEXAS OPERATIONS" in Harrison County, whereas the Texas48_Chg_Process spreadsheet lists the max cancer risk as 37.4.

Which version of the spreadsheet has the correct max cancer risk ?

Thanks,
Danielle

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 4/10/2017 1:38:14 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
CC: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: Ethylene Oxide from 2014 NEI v1 NATA modeling
Attachments: EtO-summaries_2014NEIv1_EOonly.xlsx

From: Strum, Madeleine
Sent: Friday, April 07, 2017 1:42 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Ethylene Oxide from 2014 NEI v1 NATA modeling

Hi Cindy
You asked about other regions with EtO facilities and how they compare to Region 6 and that you need this information before Monday for a meeting with your managers.

Below shows number of facilities with modeled MIRs > 50 and 100 in a million by region.

	number of facil > 100 in a million
Row Labels	**Count of EIS facility_id**
EPA Region 1	3
EPA Region 2	5
EPA Region 3	7
EPA Region 4	15
EPA Region 5	17
EPA Region 6	20
EPA Region 7	5
EPA Region 8	6
EPA Region 9	5
Grand Total	**83**

	number of facil > 50 in a million
Row Labels	**Count of facility_name**
EPA Region 1	3
EPA Region 2	5
EPA Region 3	11
EPA Region 4	18
EPA Region 5	28
EPA Region 6	22
EPA Region 7	5
EPA Region 8	7
EPA Region 9	8
Grand Total	**107**

I've attached the workbooks I used to come up with these 2 tables in case you wanted to see the emissions and where they come from (what type of release points and processes at these facilities). View3 has the process/release point level of emissions/risks and at sub facility level (most detailed) at any facility that emits ethylene oxide. I removed information on other pollutants emitted at these facilities so it would be small enough to email. Column AG has the **sub-facility** emissions (you have to sum them by facility to get facility level emissions). The other sheets are facility-level summaries for ethylene oxide (just risks) at the facility level.

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Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 4/6/2017 5:54:33 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: NATA facility sources of concern for ethylene oxide based on preliminary assessment
Attachments: Ethylene Oxide Risks of concern in R6.xlsx

From: Yurk, Jeffrey
Sent: Thursday, April 06, 2017 12:44 PM
To: Osbourne, Margaret <osbourne.margaret@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: NATA facility sources of concern for ethylene oxide based on preliminary assessment

Column O (highlighted yellow) shows where the source-specific ethylene oxide cancer risk is greater than 100 in a million in the Region. Column AG (highlighted orange). There are hospitals in this list probably due to their proximity to census block centroids which were modeled to. Their assessment included to new toxicity number for ethylene oxide and also a new set of meteorological data than has been used in the past. The met data utilized is from a 12 Km grid generated nationwide that was generated for use with EPA's CMAC model and is now considered by OAQPS as state of the art. In talking with the NATA folks, it appear that the newer met data can effect risk data by a factor of 2 to 3 in either direction and applies to all chemicals.

Jeff

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 4/24/2017 4:33:10 PM
To: Madden, Joshua [madden.joshua@epa.gov]
Subject: FW: Ethylene Oxide from 2014 NEI v1 NATA modeling
Attachments: EtO-summaries_2014NEIv1_EOonly.xlsx

From: Strum, Madeleine
Sent: Friday, April 07, 2017 1:42 PM
To: Parker, Cindy <parker.cindy@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Ethylene Oxide from 2014 NEI v1 NATA modeling

Hi Cindy
You asked about other regions with EtO facilities and how they compare to Region 6 and that you need this information before Monday for a meeting with your managers.

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EPA Region 4	15
EPA Region 5	17
EPA Region 6	20
EPA Region 7	5
EPA Region 8	6
EPA Region 9	5
Grand Total	**83**

	number of facil > 50 in a million
Row Labels	**Count of facility_name**
EPA Region 1	3
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EPA Region 3	11
EPA Region 4	18
EPA Region 5	28
EPA Region 6	22
EPA Region 7	5
EPA Region 8	7
EPA Region 9	8
Grand Total	**107**

I've attached the workbooks I used to come up with these 2 tables in case you wanted to see the emissions and where they come from (what type of release points and processes at these facilities). View3 has the process/release point level of emissions/risks and at sub facility level (most detailed) at any facility that emits ethylene oxide. I removed information on other pollutants emitted at these facilities so it would be small enough to email. Column AG has the **sub-facility** emissions (you have to sum them by facility to get facility level emissions). The other sheets are facility-level summaries for ethylene oxide (just risks) at the facility level.

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Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Osbourne, Margaret [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FA81D13BB18F4249AAB3E3B61275D58B-OSBOURNE, MARGARET]
Sent: 10/4/2017 9:29:06 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
Subject: Fwd: NATA facility sources of concern for ethylene oxide based on preliminary assessment
Attachments: Ethylene Oxide Risks of concern in R6.xlsx; ATT00001.htm; Ethylene Oxide LDEQ 2014 EI.xlsx; ATT00002.htm; Ethylene Oxide STARS 2014.xlsx; ATT00003.htm

Sent from my iPhone

Begin forwarded message:

From: "Yurk, Jeffrey" <yurk.jeffrey@epa.gov>
Date: October 4, 2017 at 12:36:40 PM CDT
To: "Osbourne, Margaret" <osbourne.margaret@epa.gov>
Subject: FW: NATA facility sources of concern for ethylene oxide based on preliminary assessment

Anupa should have this already

From: Yurk, Jeffrey
Sent: Thursday, August 10, 2017 9:22 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: NATA facility sources of concern for ethylene oxide based on preliminary assessment

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From: Yurk, Jeffrey
Sent: Thursday, June 08, 2017 9:53 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: NATA facility sources of concern for ethylene oxide based on preliminary assessment

Attached is what I think you want

From: Yurk, Jeffrey
Sent: Thursday, April 13, 2017 7:05 AM
To: Thompson, Steve <thompson.steve@epa.gov>
Subject: FW: NATA facility sources of concern for ethylene oxide based on preliminary assessment

---

From: Yurk, Jeffrey
Sent: Thursday, April 06, 2017 12:44 PM
To: Osbourne, Margaret <osbourne.margaret@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: NATA facility sources of concern for ethylene oxide based on preliminary assessment

Column O (highlighted yellow) shows where the source-specific ethylene oxide cancer risk is greater than 100 in a million in the Region. Column AG (highlighted orange). There are hospitals in this list probably due to their proximity to census block centroids which were modeled to. Their assessment included to new toxicity number for ethylene oxide and also a new set of meteorological data than has been used in the past. The met data utilized is from a 12 Km grid generated nationwide that was generated for use with EPA's CMAC model and is now considered by OAQPS as state of the art. In talking with the NATA folks, it appear that the newer met data can effect risk data by a factor of 2 to 3 in either direction and applies to all chemicals.

Jeff

Message

From: Osbourne, Margaret [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FA81D13BB18F4249AAB3E3B61275D58B-OSBOURNE, MARGARET]
Sent: 1/17/2018 5:30:51 PM
To: Thompson, Steve [thompson.steve@epa.gov]
Subject: List of ethylene oxide facilities for LA

Driver Facility Name	LOCATION_ADDRESS	State or Tribe	LOCATION_CITY	NAICS Description	Facility Type	Driver Pollutant Name
E I DuPont de Nemours & Co - Pontchartrain Site	586 Hwy 44	Louisiana	Laplace	Synthetic Rubber Manufacturing	Chemical Plant	Chloroprene
Union Carbide Corp - St Charles Operations	355 Hwy 3142 Gate 1	Louisiana	Taft	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
BCP Ingredients Inc	3830 Hwy 30	Louisiana	St. Gabriel	Other Animal Food Manufacturing		Ethylene Oxide
Air Products Performance Manufacturing Inc - Reserve Plant	474 W 19th St	Louisiana	Reserve	Surface Active Agent Manufacturing		Ethylene Oxide
Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	2201 Old Spanish Trail	Louisiana	Westlake	All Other Basic Organic Chem. Man.	Chemical Plant	Ethylene Oxide
Shell Chemical LP - Geismar Plant	7594 Hwy 75	Louisiana	Geismar	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
BASF Corp - Geismar Site	8404 River Rd (Hwy 75)	Louisiana	Geismar	All Other Basic Organic Chem. Man.	Chemical Plant	Ethylene Oxide
Taminco US Inc	3790 Hwy 30	Louisiana	St. Gabriel	All Other Basic Organic Chem. Man.	Chemical Plant	Ethylene Oxide
The Dow Chemical Co - Louisiana Operations	21255 Hwy 1	Louisiana	Plaquemine	All Other Basic Organic Chem. Man.	Chemical Plant	Ethylene Oxide

Message

From: Osbourne, Margaret [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FA81D13BB18F4249AAB3E3B61275D58B-OSBOURNE, MARGARET]
Sent: 1/17/2018 7:26:24 PM
To: Thompson, Steve [thompson.steve@epa.gov]
Subject: revised list of ethylene oxide facilities - TX

2014 NATA Ethylene Oxide Facilities Region 6				
Driver Facility Name	**State or Tribe**	**LOCATION_CITY**	**NAICS Description**	**Facility Type**
Bayport Underwood Plant (Lyondell Basell Co.)	TX	Pasadena	Petrochemical Manufacturing	Chemical Plant
Port Neches Plant (Huntsman Corp.)	TX	PORT Neches	Petrochemical Manufacturing	Chemical Plant
Texas Operations (Eastman Chemical Co.)	TX	Longview	Petrochemical Manufacturing	Chemical Plant
Midwest Sterilization Corp	TX	Laredo	Surgical Appliance and Supplies Man.	Sterilizer
Shell Technology Center Houston	TX	Houston	Petrochemical Manufacturing	Chemical Plant
Clear Lake Plant (Celanese Corp.)	TX	Pasadena	Petrochemical Manufacturing	Chemical Plant
Channelview Plant (Lyondell Basell Co.)	TX	Channelview	Petrochemical Manufacturing	Chemical Plant

Message

From: Osbourne, Margaret [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FA81D13BB18F4249AAB3E3B61275D58B-OSBOURNE, MARGARET]
Sent: 4/13/2018 12:41:42 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]
Subject: RE: 2014 NATA version 2 - DRAFT ethylene oxide point source risks
Attachments: EtO facilities LA 4-13-18.xlsx

Attached is the spreadsheet with just Louisiana facilities and the risk numbers taken out but with the comments fields in. Below is simply the list of facilities, with all comments fields, etc. taken out as well as the risk:

Facility ID	Facility Name	State	City	Address	EPA Region	V1 EtO emissions (tons)	V2 EtO emissions (tons)
5287111	Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana	Reserve	474 W 19th St	06	2	2
7451011	BCP Ingredients Inc	Louisiana	St. Gabriel	3830 Hwy 30	06	3	3
5504811	Taminco US Inc	Louisiana	St. Gabriel	3790 Hwy 30	06	1	1
7445611	Shell Chemical LP - Geismar Plant	Louisiana	Geismar	7594 Hwy 75	06	5	5
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Louisiana	Westlake	2201 Old Spanish Trail	06	6	6
8465611	BASF Corp - Geismar Site	Louisiana	Geismar	8404 River Rd (Hwy 75)	06	7	7

8467311	The Dow Chemical Co - Louisiana Operations	Louisiana	Plaquemine	21255 Hwy 1	06	2	2
7202911	Union Carbide Corp - St Charles Operations	Louisiana	Taft	355 Hwy 3142 Gate 1	06	15	15

From: Thompson, Steve
Sent: Friday, April 13, 2018 7:32 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>
Subject: Re: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Can one of you modify the spreadsheet to remove the risk data and resend to me so that I can share electronically with LDEQ?

Sent from my iPhone

On Apr 11, 2018, at 5:06 PM, Larson, Darrin <Larson.Darrin@epa.gov> wrote:

> Steve,
>
> The facility listed as just Houston Plant (line 54) is AkzoNobel (paint, coating, specialty chemicals).
>
> When you're back, the other thing we need to discuss is when to brief RA. In talking with 6MM, we're thinking early May.
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> **From:** Larson, Darrin
> **Sent:** Wednesday, April 11, 2018 3:21 PM
> **To:** Steve Thompson <thompson.steve@epa.gov>
> **Cc:** Margaret Osbourne <osbourne.margaret@epa.gov>
> **Subject:** FW: 2014 NATA version 2 - DRAFT ethylene oxide point source risks
>
> Darrin Larson
> Chief, Air Permitting Enforcement Section (6EN-AA)
> U.S. EPA Region 6
> Office: 214-665-7115
> Mobile: 972-467-5509
>
> **From:** Smith, Darcie
> **Sent:** Thursday, March 15, 2018 6:03 PM
> **To:** Ahuja, Anupa <ahuja.anupa@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Bollweg, George

<bollweg.george@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Glass, Geoffrey <GLASS.GEOFFREY@EPA.GOV>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Kierys, Dawid <kierys.dawid@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Owens, Katharine <Owens.Katharine@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Stone, William <stone.william@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Berner, Ted <Berner.Ted@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>
Subject: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hello –

You are receiving this email because you are a member of the ATRA EtO group or a NATA Regional Office lead or both. Either way, you know that in version 1 of the 2014 NATA we saw ethylene oxide emissions from point sources driving risks at the census tract level. Since that time, you have reviewed the data, worked with your states to review the data, and provided revisions back to us. We have incorporated those changes from V1 of the 2014 NATA and in preparation for version 2, have re-modeled the EtO-emitting point sources first. This is your first look at those results. **Please remember that risk results are not to be shared outside the Agency**.

The attached pdf document provides: 1) a summary of the events of the emissions review, 2) a regional count of facilities in the attached spreadsheet, and 3) an explanation of the data fields in the attached spreadsheet file. The attached spreadsheet contains a list of facilities that had a census *block* level cancer risk greater than 100-in-1 million in either version 1 (column J) or version 2 (column K). These are all provided so you can see how any data changes impacted the risk results. As you will see, there are still some facilities where we have estimated a census *tract* level cancer risk of greater than 100-in-1 million in version 2. These are indicated with a "Y" in column K. (An exact risk number is not provided because the estimates only take into account the AERMOD modeling; CMAQ is not yet complete so we have not combined the two results and we have given you our best estimate.)

We know that some of you are actively working with your states on the data review. Thank you for your time and effort doing that! There are some columns in the spreadsheet that may help focus your conversations, for example, column N, which provides information on how the EtO emissions were calculated for the process with the most emissions. And, our engineers are also working through their contacts to continue to verify the emissions and other inputs to the modeling. (If you need to contact them, Jennifer (chemical manufacturing) and Jonathan (sterilizers) are in the "CC" field.) There are columns in the spreadsheet to indicate what has been done and what type of changes have been received or are expected. **However, without additional information, there will likely be little change to these results.** If you have received additional info or revisions, please work with Madeleine to get those to us.

As you continue to work through this situation, please let us know if there's anything we can do to help or if there's additional data you need. We are happy to walk through this on the next ATRA call or set up a special purpose call. As always, if you have questions please feel free to contact me, Ted (palma.ted@epa.gov, 919-541-5470), or Madeleine (strum.madeleine@epa.gov, 919-541-2383).

Thank you,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
<image001.png> 919.541.2076
<image002.png>smith.darcie@epa.gov

Message

From: Osbourne, Margaret [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=FA81D13BB18F4249AAB3E3B61275D58B-OSBOURNE, MARGARET]
Sent: 1/17/2018 7:27:34 PM
To: Thompson, Steve [thompson.steve@epa.gov]
Subject: revised list of ethylene oxide facilities - LA

2014 NATA Ethylene Oxide Facilities Region 6				
Driver Facility Name	**State or Tribe**	**LOCATION_CITY**	**NAICS Description**	**Facility Type**
E I DuPont de Nemours & Co - Pontchartrain Site	Louisiana	Laplace	Synthetic Rubber Manufacturing	Chemical Plant
Union Carbide Corp - St Charles Operations (Dow Chem.)	LA	Taft	Petrochemical Manufacturing	Chemical Plant
BCP Ingredients Inc (Balchem Co.)	LA	St. Gabriel	Other Animal Food Manufacturing	Sterilizer
Air Products Performance Manufacturing Inc - Reserve Plant	LA	Reserve	Surface Active Agent Manufacturing	
Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	LA	Westlake	All Other Basic Organic Chem. Man.	Chemical Plant
Shell Chemical LP - Geismar Plant	LA	Geismar	Petrochemical Manufacturing	Chemical Plant
BASF Corp - Geismar Site	LA	Geismar	All Other Basic Organic Chem. Man.	Chemical Plant
Taminco US Inc (Eastman Chemical Co.)	LA	St. Gabriel	All Other Basic Organic Chem. Man.	Chemical Plant
The Dow Chemical Co - Louisiana Operations	LA	Plaquemine	All Other Basic Organic Chem. Man.	Chemical Plant

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 11/15/2017 2:55:57 PM
To: Thompson, Steve [thompson.steve@epa.gov]
CC: Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: Ethylene oxide table
Attachments: Priority Facilities Sheet..xlsx

This is the latest table from 6MM. We'll discuss today.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Parker, Cindy
Sent: Thursday, November 09, 2017 9:15 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: FW: Toy drive info, and your input needed

From: Parker, Cindy
Sent: Thursday, November 09, 2017 9:05 AM
To: Salem, Nevine <Salem.Nevine@epa.gov>; Osbourne, Margaret <osbourne.margaret@epa.gov>
Subject: FW: Toy drive info, and your input needed

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 10/10/2017 3:57:07 PM
To: Larson, Darrin [Larson.Darrin@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: Seeking information on facilities

Hi, Darrin,

I forwarded this to Margaret last week. I know she is out this week, and wanted to check in with you, as well.

OAQPS is looking for the permit applications for the facilities listed below. These facilities are R6 facilities with emissions of concern, we found through the NATA analysis. TCEQ has their permits online, but not the applications. In talking with Fran, this type of information was pulled together for Denka, and I think OAQPS is trying to get ahead of the curve a bit.

I don't know if Margaret has someone already working on this or not, and am wondering if your group would have access to the type of information OAQPS is searching for? From talking with Fran, it is the type of information we would eventually search out anyway, probably a little later down the road.

For clarification, OAQPS is searching for this:
"…release parameter information for the different release points at each facility…..details like stack height, stack diameter, stack temperature, stack flow rate, stack velocity, latitude and longitude of each release point, and process level emissions in tons."

I am hoping Enforcement, either your group or Margaret's group, has access to this type of information for these facilities?

Thank you,
Cindy

From: Parker, Cindy
Sent: Tuesday, October 03, 2017 4:11 PM
To: Osbourne, Margaret <osbourne.margaret@epa.gov>
Subject: FW: Phone call follow up

From: Lavoie, Tegan
Sent: Tuesday, October 03, 2017 11:39 AM
To: Parker, Cindy <parker.cindy@epa.gov>
Subject: Phone call follow up

Hi Cindy,

Thanks for your help on the phone today. We think we are looking for the Title V permit applications, but I think in some cases the NSR Permit applications may contain what we need. To explain, we're looking for release parameter information for the different release points at each facility. We need details like stack height, stack diameter, stack temperature, stack flow rate, stack velocity, latitude and longitude of each release point, and process level emissions in tons. I appreciate your help in obtaining any documents which contain this level of detail.

Site Name	Street Address	City	County	State

LION OIL COMPANY	1000 MCHENRY DRIVE	EL DORADO	Union	Arkansas
CLEAN HARBORS EL DORADO, LLC	309 AMERICAN CIRCLE	EL DORADO	Union	Arkansas
GREAT LAKES CHEMICAL-EL DORADO	2226 HAYNESVILLE HWY	EL DORADO	Union	Arkansas
SHELL TECHNOLOGY CENTER HOUSTON	3333 HWY 6 SOUTH	HOUSTON	Harris	Texas
CLEAR LAKE PLANT	9502 BAYPORT BLVD	PASADENA	Harris	Texas
HOUSTON PLANT	15200 ALMEDA RD	HOUSTON	Fort Bend	Texas
BAYTOWN REFINERY	2800 DECKER DR	BAYTOWN	Harris	Texas
BAYPORT UNDERWOOD PLANT	5761 UNDERWOOD RD	PASADENA	Harris	Texas
CHANNELVIEW PLANT	2502 SHELDON RD	CHANNELVIEW	Harris	Texas
TEXAS OPERATIONS	HWY 149 KODAK BLVD	LONGVIEW	Harrison	Texas
PORT NECHES PLANT	2102 SPUR 136	PORT NECHES	Jefferson	Texas
CONROE FACILITY	5451 JEFFERSON CHEMICAL RD	CONROE	Montgomery	Texas
SEADRIFT PLANT	HIGHWAY 185	SEADRIFT	Calhoun	Texas

If you have any questions, please let me know. Thanks in advance and have a great day.

Best regards,
Tegan

Tegan N. Lavoie, PhD | Physical Scientist
OAR/OAQPS/SPPD/Refining and Chemicals Group
U.S. Environmental Protection Agency
109 TW Alexander Drive, Office: E142G, MC:E143-01
Research Triangle Park, NC 27711
Phone: (919) 541-5110 | Email: lavoie.tegan@epa.gov

Message

From: Thompson, Steve [thompson.steve@epa.gov]
Sent: 1/17/2018 6:17:26 PM
To: Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: Re: List of ethylene oxide facilities for TX

Do you have a more complete facility name? Clear Lake plant? Channelview plant?

Sent from my iPhone

On Jan 17, 2018, at 11:30 AM, Osbourne, Margaret <osbourne.margaret@epa.gov> wrote:

Driver Facility Name	LOCATION_ADDRESS	State or Tribe	LOCATION_CITY	NAICS Description	Facility Type	Driver Pollutant Name
BAYPORT UNDERWOOD PLANT	5761 UNDERWOOD RD	Texas	PASADENA	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
PORT NECHES PLANT	2102 SPUR 136	Texas	PORT NECHES	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
TEXAS OPERATIONS	HWY 149 KODAK BLVD	Texas	LONGVIEW	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
Midwest Sterilization Corp	12010 General Milton Dr	Texas	Laredo	Surgical Appliance and Supplies Man.	Sterilizer	Ethylene Oxide
SHELL TECHNOLOGY CENTER HOUSTON	3333 HWY 6 SOUTH	Texas	HOUSTON	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
CLEAR LAKE PLANT	9502 BAYPORT BLVD	Texas	PASADENA	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide
CHANNELVIEW PLANT	2502 SHELD+R31:R46ON RD	Texas	CHANNELVIEW	Petrochemical Manufacturing	Chemical Plant	Ethylene Oxide

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 3/20/2018 1:09:12 PM
To: Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: FW: 2014 NATA version 2 - DRAFT ethylene oxide point source risks
Attachments: ForRegions_EtO_Emissions_and_Risk_Review_V2NATA_031518.pdf; ForRegions_EtOReview_V2NATA_031518.xlsx

Here ya go. Note the addressees. And it is a confusing spreadsheet, you need to refer to the pdf for explanations, such as for the column with Y or nothing.

From: Smith, Darcie
Sent: Thursday, March 15, 2018 6:03 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Bollweg, George <bollweg.george@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Glass, Geoffrey <GLASS.GEOFFREY@EPA.GOV>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Kierys, Dawid <kierys.dawid@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Owens, Katharine <Owens.Katharine@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Stone, William <stone.william@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Berner, Ted <Berner.Ted@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>
Subject: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hello –

You are receiving this email because you are a member of the ATRA EtO group or a NATA Regional Office lead or both. Either way, you know that in version 1 of the 2014 NATA we saw ethylene oxide emissions from point sources driving risks at the census tract level. Since that time, you have reviewed the data, worked with your states to review the data, and provided revisions back to us. We have incorporated those changes from V1 of the 2014 NATA and in preparation for version 2, have re-modeled the EtO-emitting point sources first. This is your first look at those results. **Please remember that risk results are not to be shared outside the Agency**.

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which provides information on how the EtO emissions were calculated for the process with the most emissions. And, our engineers are also working through their contacts to continue to verify the emissions and other inputs to the modeling. (If you need to contact them, Jennifer (chemical manufacturing) and Jonathan (sterilizers) are in the "CC" field.) There are columns in the spreadsheet to indicate what has been done and what type of changes have been received or are expected. **However, without additional information, there will likely be little change to these results.** If you have received additional info or revisions, please work with Madeleine to get those to us.

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Thank you,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Parker, Cindy [parker.cindy@epa.gov]
Sent: 4/6/2017 1:22:25 PM
To: Osbourne, Margaret [osbourne.margaret@epa.gov]
Subject: FW: NATA reviews

Here.

From: Verhalen, Frances
Sent: Wednesday, April 05, 2017 11:07 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA reviews

Thanks, Darcie. DuPont Pontchartrain Works (now Denka) is on the list.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Smith, Darcie
Sent: Wednesday, April 05, 2017 9:34 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: RE: NATA reviews

Hi Fran –

In December 2016, IRIS released a new URE for ethylene oxide that was 56 times more potent. We went ahead and included the value in our most recent round of point source modeling from December so that you guys would have time to review the results. Here's a link to the IRIS assessment, if you're interested: https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025

Madeleine has contacted LA about the Union Carbide facility, and a few others, and they have said they reviewed them and don't have any changes to the emissions. I'll forward you that email exchange.

As for risks, you want to be sure that you're also reviewing the files from December as that's where the EtO risks show up. For example, for the Union Carbide facility, it isn't 22 in 1 million, but rather 1766 in 1 million. (Sorry for the bad news!) I've pasted below the top facilities in LA.

Please feel free to contact Ted at (919) 541-5470 for additional information about risks at R6 facilities or contact any of us with additional questions.

Thanks,
Darcie

State or Tribe	FIPs	Facility Name	Facility NEI ID	Cancer Risk 2014 (December 2016 Analysis) (in a million)	Cancer Risk 2014 (September 2016 Analysis) (in a million)
LA	22047	BCP Ingredients Inc	7451011	2254.996	10.182
LA	22095	E I DuPont de Nemours & Co - Pontchartrain Site	8026611	2004.231	1572.185
LA	22089	Union Carbide Corp - St Charles Operations	7202911	1766.916	22.492
LA	22047	Taminco US Inc	5504811	1105.059	7.065
LA	22095	Air Products Performance Manufacturing Inc - Reserve Plant	5287111	713.679	10.493
LA	22019	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	8468011	680.012	14.031
LA	22057	Thoma-Sea Marine Constructors LLC - Lockport Yard	5539911	533.960	453.138
LA	22005	Shell Chemical LP - Geismar Plant	7445611	473.742	8.102
LA	22101	CAMERON INTERNATIONAL CORP	16723111	450.624	336.268
LA	22005	BASF Corp - Geismar Site	8465611	317.639	32.325
LA	22047	The Dow Chemical Co - Louisiana Operations	8467311	192.983	31.983

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Verhalen, Frances
Sent: Wednesday, April 05, 2017 10:01 AM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: NATA reviews

We are starting the NATA data reviews (rebuilding institutional knowledge). And there is discussion about ethylene oxide.

What change in risk evaluation has occurred that is causing EtOx to pop? I have attached what we think is the facility with the highest emission for R6, and in LA near LaPlace.

My staff and I are playing catch up and appreciate your assistance in educating us on this topic.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202

214-665-2172
verhalen.frances@epa.gov

Message

From: Stenger, Wren [stenger.wren@epa.gov]
Sent: 8/2/2018 8:02:17 PM
To: Thompson, Steve [thompson.steve@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]
CC: Seager, Cheryl [Seager.Cheryl@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]
Subject: RE: 2014 NATA short term facility action

Ok. I have asked Fran to add this one. Do you have a basis for including it? Otherwise, Fran will prepare something to include.

From: Thompson, Steve
Sent: Thursday, August 02, 2018 1:19 PM
To: Stenger, Wren <stenger.wren@epa.gov>
Cc: Seager, Cheryl <Seager.Cheryl@epa.gov>; Price, Lisa <Price.Lisa@epa.gov>
Subject: Re: 2014 NATA short term facility action

Thanks Wren.

One addition would be to also add Port Neches, TX (Huntsman Port Neches) as a focus area.

Based upon the most recent emissions reporting for the facility (TRI), the emissions of ethylene oxide from this facility could currently be as high as 38 tpy. This would make this the largest source in the Region and would definitely significantly increase modeling risks. The 2014 NATA emissions that were modeled for the facility were 10.8 tpy.

Thanks,
Steve

Sent from my iPhone

On Aug 2, 2018, at 11:46 AM, Stenger, Wren <stenger.wren@epa.gov> wrote:

> Here is the draft for our short term facilities action. I will share with David at 1 pm. See if we got everything covered to your satisfaction. Included state coord and we may have more facilities in the short term after coord with state.
>
> WREN STENGER
> DIRECTOR, MULTIMEDIA DIVISION
> EPA REGION 6 DALLAS, TEXAS
> 214.665.6563
>
> <2014 NATA R6 short-term action recommendation Aug 2 2018.docx>

Message

From: Stenger, Wren [stenger.wren@epa.gov]
Sent: 8/2/2018 8:11:50 PM
To: Seager, Cheryl [Seager.Cheryl@epa.gov]; Thompson, Steve [thompson.steve@epa.gov]; Gray, David [gray.david@epa.gov]
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]
Subject: 2014 NATA short-term facilities list
Attachments: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

Here is a final draft. I think we have all the concerns addressed.

David, we took out mention of Denka since risk is NOT driven by ethylene oxide.

I will send this to OAR at 4 pm.

WREN STENGER
DIRECTOR, MULTIMEDIA DIVISION
EPA REGION 6 DALLAS, TEXAS
214.665.6583

2014 NATA Release Coordination – Ethylene Oxide
August 2, 2018

- EPA Region 6 has 10 facilities with risk exceeding 100 in 1,000,000 from air toxics associated with ethylene oxide (EtO) based on the 2014 EIs and TRIs.
    - Nine facilities have risk driven by ethylene oxide.
    - Four facilities are in Louisiana, four in Texas, and one in New Mexico.
- The national approach is to (1) prioritize a subset of facilities for action in the short-term, and (2) develop rulemaking based on ethylene oxide technologies and operations.
- In the short-term, based on the cumulative risk at the metropolitan statistical area (MSA) level, Region 6 proposes to address, at a minimum,
    - The New Orleans-Metarie, LA, MSA
        - Facilities that drive the risk (tract level): Union Carbide – St. Charles (risk 2,000), BCP Ingredients (risk 2,000), Air Products – Reserve (100)
        - Reason for prioritization: Cumulative risk of the New Orleans MSA (approximately 325 in 1,000,000) is highest in nation
    - The Beaumont-Port Arthur TX MSA
        - Facility that drives the risk (tract level): Port Neches Plant - Huntsman Corporation (risk 300)
        - Reason for prioritization: New information indicates that Port Neches Plant increased emissions from 10.8 tons per year (tpy) in 2014 to 38 tpy in 2017
- As Region 6 gathers information about EtO technologies, we need to engage the states without delay in planning. This may result in additional priority facilities.
- The States of Texas and Louisiana have requested coordination on the 2014 NATA; both may be able to provide assessments and obtain risk reductions from facilities quickly as they have authority for permitting and compliance for air toxics.
- The State of New Mexico has confirmed that the Santa Teresa facility installed new controls after the 2014 TRI, and the emissions have been reduced by 83%. Therefore, this facility is low priority for short-term action.

Message

From: Stenger, Wren [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C109285F44B14F70A224BE41AB99E9E2-STENGER, WREN]
Sent: 8/2/2018 7:39:06 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
Subject: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx
Attachments: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

Can you add Huntsman Port Neches?

Message

From: Stenger, Wren [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C109285F44B14F70A224BE41AB99E9E2-STENGER, WREN]
Sent: 8/2/2018 8:09:00 PM
To: Verhalen, Frances [verhalen.frances@epa.gov]
Subject: RE: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

Perfect.

From: Verhalen, Frances
Sent: Thursday, August 02, 2018 2:54 PM
To: Stenger, Wren <stenger.wren@epa.gov>
Subject: RE: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

Will this work? I accepted your changes so you will only see my changes.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

From: Stenger, Wren
Sent: Thursday, August 02, 2018 2:39 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

Can you add Huntsman Port Neches?

Message

From: Verhalen, Frances [verhalen.frances@epa.gov]
Sent: 8/2/2018 7:53:52 PM
To: Stenger, Wren [stenger.wren@epa.gov]
Subject: RE: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx
Attachments: 2014 NATA R6 short-term action recommendation Aug 2 2018 (003).docx

Will this work? I accepted your changes so you will only see my changes.

Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section
US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

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Sent: Thursday, August 02, 2018 2:39 PM
To: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: 2014 NATA R6 short-term action recommendation Aug 2 2018.docx

Can you add Huntsman Port Neches?

Message

From: Yurk, Jeffrey [yurk.jeffrey@epa.gov]
Sent: 4/5/2017 5:50:27 PM
To: Thompson, Steve [thompson.steve@epa.gov]
Subject: FW: NATA reviews.

From: Parker, Cindy
Sent: Wednesday, April 05, 2017 12:07 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Subject: FW: NATA reviews.

Good Morning, Jeff,
Re: my voicemail earlier –

Here is one email with information. We are particularly interested in the effects of ethylene oxide and at what levels. I'm sure the information below won't contain enough info for you – but I'm not sure exactly which information you do need? We have several worksheets on a sharepoint site, emissions data, and I can get you access to them, but if I could narrow it down for you, I'm happy to do that, too.

Fran mentioned you might call her, feel free to do that, too. I know you have helped Ruben in the past, and we appreciate your continued assistance.

Cindy Parker

From: Smith, Darcie
Sent: Wednesday, April 05, 2017 9:34 AM
To: Verhalen, Frances <verhalen.frances@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
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Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

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Sent: Wednesday, April 05, 2017 10:01 AM
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Air Monitoring/Grants Section

US Environmental Protection Agency
1445 Ross Avenue (MC 6MM-AM)
Dallas, TX 75202
214-665-2172
verhalen.frances@epa.gov

Message

From: Thompson, Steve [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DEB5F1524AE94DC69ED0F4B2D6CA446A-THOMPSON, STEVE]
Sent: 8/22/2018 12:48:57 PM
To: gilrein.stephen@epa.gov; Seager, Cheryl [Seager.Cheryl@epa.gov]
Subject: FW: NATA action items from today's call
Attachments: Revised of List of 26 facilities 08 21 2018.xlsx; 2014 NATA Overview Fact Sheet..pdf; Ethylene Oxide Fact Sheet.Final.8.21.18.pdf

Information related to the release today.

From: Donaldson, Guy
Sent: Wednesday, August 22, 2018 7:22 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>; Taheri, Diane <Taheri.Diane@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: NATA action items from today's call

FYI

From: Stenger, Wren
Sent: Wednesday, August 22, 2018 7:16 AM
To: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: Fw: NATA action items from today's call

From: Perez, Idalia
Sent: Tuesday, August 21, 2018 4:29 PM
To: Air Division Directors and Deputies
Cc: Davis, Alison; Bremer, Kristen; Rimer, Kelly; Smith, Darcie; Caparoso, Jennifer; Lassiter, Penny; Shappley, Ned; Sasser, Erika; Koerber, Mike
Subject: RE: NATA action items from today's call

Adding the fact sheets to the earlier thread. Please note that these are not the final versions – formatting still needs to be done. This should be enough to help folks prep for tomorrow.

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
P: 415.972.3248 | email: perez.idalia@epa.gov
OAR Lead Region SharePoint Site

Our mission is to protect human health and the environment.

From: Perez, Idalia
Sent: Tuesday, August 21, 2018 12:53 PM
To: Air Division Directors and Deputies <Air_Division_Directors_and_Deputies@epa.gov>
Cc: Davis, Alison <Davis.Alison@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>; Shappley, Ned <Shappley.Ned@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>; Koerber, Mike <Koerber.Mike@epa.gov>
Subject: NATA action items from today's call

ADD,

At the bottom of the emails are the following action items from today's call:

- Facility list (see attachment, not below)
- Information for August 22 Regional Call re: Workgroups
- Corporate call list
- Invitees to congressional call

Still pending:

- Invitees to communities call – still putting this together – will be sent separate in the next day or so
- Materials (fact sheets) – will be sent separate later today

Please let me know if there is anything else that you need and we will work to get it to you as soon as possible.
-Idalia

1. Information for August 22 Regional Call re: Workgroups

   Wednesday, August 22 at 3:30 p.m. – 4:30 p.m. EDT
   919 541 1595 (no pass code)
   Initial call with Regions to begin coordinating efforts for controlling ethylene oxide air emissions at chemical facilities
   (ADDs: please invite appropriate staff)

2. Corporate call list – see below

DRAFT - INTERNAL USE ONLY

Organization	Contact
Air Products Performance (now Evonik)	Teresa Reksel
B Braun Medical	Rex Boland
BASF Corporation	Mark Allen
BCP Ingredients	
C R Bard	Beth Bruette
Croda Inc.	

Edwards Lifesciences	Manuel Palma
Medline	
Medtronic (a.k.a. MedPlat/Viant)	Cindy Resman
Midwest Sterilization Corporation	Wayne Fitzpatrick
Port Neches Plant (Hunstman)	Ed Gunderson
Sasol Chemical - LCCC	Annette Habetz
Shell Technology Center Houston	Kenyatta Miles
Solvay (now Lanxess)	Rob Trozenski
Sterigenics	Kathy Hoffman
Terumo BCT	Jay Willis
Texas Operations (Eastman)/Taminco US (subsiduary of Eastman)	Steve Gossett
Union Carbide/Dow	Russell Wozniak

3. Invitees to congressional call – see below

DRAFT DRAFT DRAFT -- best guesses for congressional districts and nearby districts representing census tracts or block groups with higher risk numbers

State	City	EPA Region	MSA Area Name	US_rep	US_rep_aff	US_rep_dist	US_Sen_1	US_Sen_1_aff
Puerto Rico	Anasco	02	Aguadilla-Isabela, PR	Gonzalez-Colon, Jenniffer	R	Puerto Rico		
West Virginia	SOUTH CHARLESTON	03		Mooney, Alex	R	WV-2	Manchin, Joe	D
Pennsylvania	ALLENTOWN	03	Allentown-Bethlehem-Easton, PA-NJ	vacant		PA-15	Casey, Robert "Bob"	D
Delaware	New Castle	3	Philly-Camden-Wilmington	Rochester, Lisa	D	DE-AL	Carper, Tom	D
South Carolina	CHARLESTON	04	Charleston-North Charleston, SC	Clyburn, James "Jim"	D	SC-6	Graham, Lindsey	R
Georgia	Covington	4	Atlanta	Johnson, Hank	D	GA-04	Isakson, Johnny	R
Georgia	Smyrna	4	Atlanta	Lowdermilk, Barry	R	GA-11	Isakson, Johnny	R
Wisconsin	Milton	05		Ryan, Paul	R	WI-1	Johnson, Ron	R

Illinois	Willowbrook	05	Chicago-Naperville-Elgin, IL-IN-WI	Foster, Bill	D	IL-11	Durbin, Richard	D
Michigan	Wyoming	5	Grand Rapids-Wyoming	Huizenga, Bill	R	MI-02	Stabenow, Debbie	D
Texas	LONGVIEW	06	Marshall, TX	Gohmert, Louie	R	TX-1	Cornyn, John	R
Texas	PORT NECHES	06	Beaumont-Port Arthur, TX	Weber, Randy	R	TX-14	Cornyn, John	R
Louisiana	St. Gabriel	06	Baton Rouge, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
Louisiana	Taft	06	New Orleans-Metairie, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
Louisiana	St. Gabriel	06	New Orleans-Metairie, LA	Richmond, Cedric	D	LA-2	Cassidy, Bill	R
New Mexico	Santa Teresa	6	Las Cruces	Pearce, Stevan	R	NM-02	Udall, Tom	D
Texas	Laredo	6	Laredo	Cuellar, Henry	D	TX-28	Cornyn, John	R
Texas	Clear Lake	6	Houston	Babin, Brian	R	TX-36	Cornyn, John	R
Texas	Channelview	6	Houston	Green, Gene	D	TX-29	Cornyn, John	R
Missouri	VERONA	07		Long, Billy	R	MO-7	McCaskill, Claire	D
Missouri	Jackson	07	Cape Girardeau, MO-IL	Smith, Jason	R	MO-8	McCaskill, Claire	D
Colorado	Lakewood	8	Denver	Perlmutter, Ed	d	CO-07	Bennet, Michael	D

Idalia M. Pérez, Ph.D. | OAR Lead Region Coordinator
U.S. Environmental Protection Agency – Region 9
75 Hawthorne St. (AIR-1), San Francisco, CA 94105
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Our mission is to protect human health and the environment.

Message

From: Thompson, Steve [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DEB5F1524AE94DC69ED0F4B2D6CA446A-THOMPSON, STEVE]
Sent: 4/18/2018 10:03:17 PM
To: Lourdes.Iturralde@LA.GOV
Subject: Fwd: 2014 NATA -LA facilities emitting ethylene oxide
Attachments: EtO facilities LA 4-13-18.xlsx; ATT00001.htm

Who do you want us to work through when coordinating discussions with the facilities?

I sent this list last week to Celena and April.

Sent from my iPhone

Begin forwarded message:

> **From:** "Thompson, Steve" <thompson.steve@epa.gov>
> **Date:** April 13, 2018 at 8:31:16 AM CDT
> **To:** Celena Cage <celena.cage@la.gov>, "April.Baiamonte@LA.GOV" <April.Baiamonte@LA.GOV>
> **Subject: 2014 NATA -LA facilities emitting ethylene oxide**
>
> Here are the LA facilities. We will talk next week about reaching out to facilities.

Facility ID	Facility Name	State	City	Address	EPA Region	V1 EtO emissions (tons)	V2 emi (t
5287111	Air Products Performance Manufacturing Inc - Reserve Plant	Louisiana	Reserve	474 W 19th St	06	2	
7451011	BCP Ingredients Inc	Louisiana	St. Gabriel	3830 Hwy 30	06	3	
5504811	Taminco US Inc	Louisiana	St. Gabriel	3790 Hwy 30	06	1	
7445611	Shell Chemical LP - Geismar Plant	Louisiana	Geismar	7594 Hwy 75	06	5	

8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Louisiana	Westlake	2201 Old Spanish Trail	06	6
8465611	BASF Corp - Geismar Site	Louisiana	Geismar	8404 River Rd (Hwy 75)	06	7
8467311	The Dow Chemical Co - Louisiana Operations	Louisiana	Plaquemine	21255 Hwy 1	06	2
7202911	Union Carbide Corp - St Charles Operations	Louisiana	Taft	355 Hwy 3142 Gate 1	06	15

Message

From: Thompson, Steve [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=DEB5F1524AE94DC69ED0F4B2D6CA446A-THOMPSON, STEVE]
Sent: 6/29/2018 7:49:57 PM
To: ramiro.garcia@tceq.texas.gov
Subject: List of TX EtO facilities
Attachments: Ethylene Oxide NATA V2 w 061418 list TX.xlsx

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/16/2018 2:36:04 PM
To: Thompson, Steve [thompson.steve@epa.gov]
Subject: FW: NATA 5 LA facilities
Attachments: NATA 5 LA facilities.xlsx

This is what Anupa thought would be helpful to share with LDEQ. When you get a chance, let's discuss.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Thursday, August 16, 2018 9:14 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: NATA 5 LA facilities

Attached is a spreadsheet for the five facilities in LA that details the EO emissions at each emission point at each facility as reported in the emissions inventory for 2104. The spreadsheet also contains the source description and permit number for each emission point.

All of the facilities on this list have been contacted by R6 and all but Union Carbide have confirmed the total EO emissions at their facility are the same as what was used by OAQPS in the modeling. Union Carbide has thus far not returned our phone calls.

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 6/22/2018 1:53:14 PM
To: Seager, Cheryl [Seager.Cheryl@epa.gov]; Gilrein, Stephen [gilrein.stephen@epa.gov]
CC: Thompson, Steve [thompson.steve@epa.gov]
Subject: FW: Can you send the current list of ethylene oxide facilities? Tks
Attachments: Ethylene Oxide NATA V2 w 061418 list LA.xlsx

This spreadsheet has the four LA facilities on the latest list of 9 R6 EtO facilities expected to be on the NATA list. The list of 9 was part of the PowerPoint OAQPS used to brief you and Wren on 6/14 (it's in the meeting invitation). OAQPS didn't provide updated emissions data, so this spreadsheet has the emissions data for the previous version (V2).

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Thursday, June 21, 2018 2:37 PM
To: Thompson, Steve <thompson.steve@epa.gov>; Lourdes Iturralde <Lourdes.Iturralde@LA.GOV>
Subject: RE: Can you send the current list of ethylene oxide facilities? Tks

Here's the latest list of EtO facilities expected to be on the NATA list. OAQPS hasn't provided us the latest emission numbers (just the facility names), but I included the most recent emission numbers we have for reference.

Please let me know if you have any questions.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Thompson, Steve
Sent: Thursday, June 21, 2018 1:48 PM
To: Lourdes Iturralde <Lourdes.Iturralde@LA.GOV>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: Re: Can you send the current list of ethylene oxide facilities? Tks

Darrin,
Can you please send Lourdes the updated list of LA facilities?

Thanks,
Steve

Sent from my iPhone

On Jun 21, 2018, at 12:44 PM, Lourdes Iturralde <Lourdes.Iturralde@LA.GOV> wrote:

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 6/22/2018 1:59:13 PM
To: Seager, Cheryl [Seager.Cheryl@epa.gov]; Gilrein, Stephen [gilrein.stephen@epa.gov]
CC: Thompson, Steve [thompson.steve@epa.gov]
Subject: FW: Ethylene oxide facility in NM - NATA
Attachments: Ethylene Oxide NATA NM.xlsx

And finally, here's the NM facility. There was only one NM facility on the earlier version, and it's also the current version.

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Larson, Darrin
Sent: Thursday, May 24, 2018 1:54 PM
To: 'Gruebel, Ralph, NMENV' <Ralph.Gruebel@state.nm.us>
Cc: Steve Thompson <thompson.steve@epa.gov>
Subject: Ethylene oxide facility in NM - NATA

Hi Ralph,

Here's the facility I mentioned during our call. Please let me know if you would like to discuss further.

For more info. on NATA in general, here's the link: https://www.epa.gov/national-air-toxics-assessment

And here's a link to the IRIS ethylene oxide page:
https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025

Darrin

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 7/13/2018 7:20:15 PM
To: Thompson, Steve [thompson.steve@epa.gov]
Subject: Fwd: 2014/2016 EtO emissions from Sterginics in NM?

Sent from my iPhone

Begin forwarded message:

> **From:** "Larson, Darrin" <Larson.Darrin@epa.gov>
> **Date:** July 13, 2018 at 2:19:58 PM CDT
> **To:** "Ahuja, Anupa" <ahuja.anupa@epa.gov>
> **Subject: Re: 2014/2016 EtO emissions from Sterginics in NM?**
>
> Thanks, Anupa. That would actually match an 83% reduction of 3 tons. But let's see what Mort finds out.
>
> Sent from my iPhone
>
> On Jul 13, 2018, at 1:03 PM, Ahuja, Anupa <ahuja.anupa@epa.gov> wrote:
>
>> I found the TRI website but it keeps crashing my system. Before it crashed (for like the 5th time), the EtO emissions in Dona Ana county (where sterigenics is located) was 967 lbs for 2016 (= 0.48 ton). I am guessing there are no other facilities located there but my computer crashes before I can see the report. They only have data available for 2016 and 2015, both after the new controls were installed. Maybe Mort has access to historical (2014) data. Obviously the 0.48 ton is way less than the 6 ton combined limit, but since I can't get to the 2014 data, I have nothing to compare to see how much emissions went down.
>>
>> **From:** Ahuja, Anupa
>> **Sent:** Friday, July 13, 2018 12:13 PM
>> **To:** Larson, Darrin <Larson.Darrin@epa.gov>
>> **Subject:** RE: 2014/2016 EtO emissions from Sterginics in NM?
>>
>> Sure, I will look.
>>
>> **From:** Larson, Darrin
>> **Sent:** Friday, July 13, 2018 12:11 PM
>> **To:** Ahuja, Anupa <ahuja.anupa@epa.gov>
>> **Subject:** RE: 2014/2016 EtO emissions from Sterginics in NM?

I guess not.

Can you see if there is any info. publicly available?

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Ahuja, Anupa
Sent: Friday, July 13, 2018 11:59 AM
To: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: 2014/2016 EtO emissions from Sterginics in NM?

Got this in the am. I don't think I will get it today.

From: Wakeland, Morton
Sent: Friday, July 13, 2018 8:06 AM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

am just back in Friday – out all week, may have to leave in a few…will try to get to
Mort

Morton E. Wakeland, Jr., Ph.D.
EPCRA 313 Enforcement & TRI Program Coordinator
Waste Compliance III Section
Compliance Assurance & Enforcement Division
U.S. EPA Region 6
Dallas, Texas
(214.665.8116)

From: Yurk, Jeffrey
Sent: Thursday, July 12, 2018 12:48 PM
To: Wakeland, Morton <wakeland.morton@epa.gov>
Cc: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: RE: 2014/2016 EtO emissions from Sterginics in NM?

Mort: Can you help Anupa out with ethylene oxide air emissions from TRI requested below for Sterginics in New Mexico?

Thanks,

Jeff

From: Ahuja, Anupa
Sent: Thursday, July 12, 2018 12:44 PM
To: Yurk, Jeffrey <yurk.jeffrey@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>; Thompson, Steve <thompson.steve@epa.gov>
Subject: 2014/2016 EtO emissions from Sterginics in NM?

Hi Jeff,
Steve Thompson is asking if the EtO emissions in TRI have been reduced by 83% in 2016 vs 2014. If you send the emissions for those 2 yrs, I can do the calc.

Thank you,
Anupa

Message

From: Jesse Chacon [jesse.chacon@tceq.texas.gov]
Sent: 6/6/2018 1:47:09 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]
Subject: FW: Texas Notification Report
Attachments: EPA_2018-05-07.rtf; O1509_Veolia ES Technical Solutions, LLC_SOP.docx; O1509_Veolia ES Technical Solutions, LLC_SOB.docx; O1651_3M COMPANY_SOB.docx; O1651_3M COMPANY_SOP.docx; O1911_Kuraray America, Inc._SOB.docx; O1911_Kuraray America, Inc._SOP.docx; O2286_Huntsman Petrochemical LLC_SOP.docx; O2286_Huntsman Petrochemical LLC_SOB.docx; O2732_Holly Energy Partners - Operating, L.P._SOB.docx; O2732_Holly Energy Partners - Operating, L.P._SOP.docx; O3472_ETC Field Services LLC_SOB.docx; O3472_ETC Field Services LLC_SOP.docx; O3821_Enbridge Pipelines (Texas Gathering) L.P._SOB.docx; O3821_Enbridge Pipelines (Texas Gathering) L.P._SOP.docx; O3846_EnCana Oil & Gas (USA) Inc._SOB.docx; O3846_EnCana Oil & Gas (USA) Inc._SOP.docx; O3962_LBC Houston, L.P._SOP.pdf; O3962_LBC Houston, L.P._SOB.docx; O3976_ENBRIDGE PIPELINES TEXAS GATHERING LP_SOP.docx; O3976_ENBRIDGE PIPELINES TEXAS GATHERING LP_SOB.docx; O3995_TALKE USA INC_SOB.docx; O3995_TALKE USA INC_SOP.docx

Hi Aimee,

We mistakenly entered the EPA review start date tracking element for O3976/26441 ENBRIDGE PIPELINES TEXAS GATHERING LP, which resulted in the project showing up in the below report.

The public comment period actually started 5/24/18. EPA review should actually start on 6/12/18. The tracking elements are in the process of being updated and the project will be reflected in the next report.

Sorry for any inconvenience. Let me know if you have any questions.

Jesse

From: Donna Williams
Sent: Monday, May 07, 2018 9:22 AM
To: Wilson.aimee@epa.gov
Cc: Mike Wilson; Jesse Chacon; Julie Guthrie; Kelley Oswalt; Tan Nguyen; Alfredo Mendoza
Subject: Texas Notification Report

Initial Issuance Projects:
O3962 - LBC Houston, L.P.
O3976 - ENBRIDGE PIPELINES TEXAS GATHERING LP
O3995 - TALKE USA INC

Minor Revision Projects:
O1911 - Kuraray America, Inc.
O2732 - Holly Energy Partners - Operating, L.P.
O3821 - Enbridge Pipelines (Texas Gathering) L.P.
O3846 - EnCana Oil & Gas (USA) Inc.

Renewal Projects:
O1509 - Veolia ES Technical Solutions, LLC
O1651 - 3M COMPANY
O2286 - Huntsman Petrochemical LLC
O3472 - ETC Field Services LLC

The following *Issued Permit* did not appear on the report due to technical difficulties:
O1440 – *Phillips 66 Company* – Minor Revision

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Huntsman Petrochemical LLC

AUTHORIZING THE OPERATION OF
Huntsman Port Neches
E3/E6 Units
Petrochemical Manufacturing

LOCATED AT
Jefferson County, Texas
Latitude 29° 58' 5" Longitude 93° 55' 35"
Regulated Entity Number: RN100219252

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O2286 Issuance Date: _____

_____
For the Commission

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Section **Page**

[TOC \o "1-3" \h \z \t "SOP_Heading1,1,SOP_Heading2,2,SOP_Heading2 + Centered,2,SOP_Heading1 + Centered,1"]

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]**Special Terms and Conditions:**

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

    D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart PPP as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.730 which incorporates the 40 CFR Part 63 Subpart by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

   A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

   B. Title 30 TAC § 101.3 (relating to Circumvention)

   C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

   D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

   E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

   F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

   G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

   H. Title 30 TAC § 101.221 (relating to Operational Requirements)

   I. Title 30 TAC § 101.222 (relating to Demonstrations)

   J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

   A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

      (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

      (ii) Title 30 TAC § 111.111(a)(1)(E)

      (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

      (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that

does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is

determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer

visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(a)(1).

5. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:

A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks

(iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)

(v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)

(xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xvi) Title 30 TAC § 115.547(4) (relating to Exemptions)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

7. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

8. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

   A. Are incorporated by reference into this permit as applicable requirements

   B. Shall be located with this operating permit

   C. Are not eligible for a permit shield

9. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

10. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

11. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing

required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

12. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

        (i) For sources in the Beaumont-Port Arthur Nonattainment area, 30 TAC § 117.9000

13. Use of Emission Credits to comply with applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) Offsets for Title 30 TAC Chapter 116

    B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)

        (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

        (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

        (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

        (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

14. Use of Discrete Emission Credits to comply with the applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) If applicable, offsets for Title 30 TAC Chapter 116

        (iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

15. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

16. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

B. The permit holder shall comply with 40 CFR Part 82, Subpart A for controlling the production, transformation, destruction, export or import of a controlled (ozone-depleting) substance or product as specified in 40 CFR § 82.1 - § 82.13 and the applicable Part 82 Appendices.

C. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

D. The permit holder shall comply with 40 CFR Part 82, Subpart A, § 82.13 related to recordkeeping and reporting requirements for the production and consumption of ozone depleting substances.

Permit Location

17. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

18. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 14

Applicable Requirements Summary 21

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E3FE353	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-22	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
E3FE353	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E3FE355	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-22	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
E3FE355	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E3FE356	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-22	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
E3FE356	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E3FUG	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
E3LROSCW	LOADING/UNLOADIN G OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
E3LRSICW	LOADING/UNLOADIN G OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E3NSCRB	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
E3TE3381	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E3TE3386	STORAGE TANKS/VESSELS	N/A	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E3TE3386	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E3TE3387	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E3TE3388	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E3TE3388	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E3TE3389	STORAGE TANKS/VESSELS	N/A	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E3TE357	STORAGE TANKS/VESSELS	N/A	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6FUG	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
E6LR0SCW	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
E6LR0SPC	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
E6LR0SPW	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E6NSCRB	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-01	30 TAC Chapter 111, Visible Emissions	No changing attributes.
E6SCRBTK	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE614	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE614	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E6TE6212	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE6212	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E6TE6213	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE6214	STORAGE TANKS/VESSELS	N/A	R115	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE628A	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE628A	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E6TE628B	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
E6TE628B	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E6TE632	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E6TE632	STORAGE TANKS/VESSELS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
E7RE9803	FLARES	N/A	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FUG63PPP	FUGITIVE EMISSION UNITS	N/A	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
GRPE3TK1	STORAGE TANKS/VESSELS	E3TE3367, E3TE3368, E3TE3369, E3TE3370, E3TE3371, E3TE3385	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE3TK1	STORAGE TANKS/VESSELS	E3TE3367, E3TE3368, E3TE3369, E3TE3370, E3TE3371, E3TE3385	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
GRPE3TK2	STORAGE TANKS/VESSELS	E3TE312, E3TE3128, E3TE313, E3TE314, E3TE3147, E3TE3148, E3TE3149, E3TE315, E3TE3150, E3TE3151, E3TE3152, E3TE3153, E3TE3154, E3TE3155, E3TE3358, E3TE3360, E3TE3361, E3TE3363, E3TE3364, E3TE3377, E3TE3378, E3TE3379, E3TE3380, E3TE344, E3TE391, E3TE392, E3TE393, E3TE394, E3TE3358, E3TE3380	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE3TK3	STORAGE TANKS/VESSELS	E3TE3357, E3TE3359, E3TE3362, E3TE3376, E3TE345, E3TE347	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE3TK3	STORAGE	E3TE3357, E3TE3359,	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS	E3TE3362, E3TE3376, E3TE345, E3TE347			
GRPE3TK4	STORAGE TANKS/VESSELS	E3TE3125, E3TE3374, E3TE3375, E3TE346, E3TE348	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE3TK4	STORAGE TANKS/VESSELS	E3TE3125, E3TE3374, E3TE3375, E3TE346, E3TE348	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
GRPE6PV1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	E6FE61, E6FE62, E6FE624, E6FE63, E6FE64	R5121-20	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
GRPE6PV1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	E6FE61, E6FE62, E6FE624, E6FE63, E6FE64	R5121-22	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
GRPE6PV1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	E6FE61, E6FE62, E6FE624, E6FE63, E6FE64	R5121-226	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
GRPE6PV1	EMISSION POINTS/STATIONARY	E6FE61, E6FE62, E6FE624, E6FE63, E6FE64	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
GRPE6TK1	STORAGE TANKS/VESSELS	E6TE633, E6TE634, E6TE635, E6TE640, E6TE641	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE6TK1	STORAGE TANKS/VESSELS	E6TE633, E6TE634, E6TE635, E6TE640, E6TE641	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
GRPE6TK2	STORAGE TANKS/VESSELS	E6TE636, E6TE637, E6TE638, E6TE639, E6TE651	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE6TK2	STORAGE TANKS/VESSELS	E6TE636, E6TE637, E6TE638, E6TE639, E6TE651	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
GRPE6TK3	STORAGE TANKS/VESSELS	E6TE61, E6TE610, E6TE611, E6TE62, E6TE63, E6TE64, E6TE65, E6TE66, E6TE67, E6TE68, E6TE69	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPE6TK3	STORAGE TANKS/VESSELS	E6TE61, E6TE610, E6TE611, E6TE62, E6TE63, E6TE64, E6TE65, E6TE66, E6TE67, E6TE68, E6TE69	63PPP	40 CFR Part 63, Subpart PPP	No changing attributes.
PROE3FE353	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	No changing attributes.
PROE3FE355	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	No changing attributes.
PROE3FE356	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	No changing attributes.
PROE6FE61	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	Control Device = Absorber.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PROE6FE61	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-02	30 TAC Chapter 115, Batch Processes	Control Device = Flare.
PROE6FE62	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	Control Device = Absorber.
PROE6FE62	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-02	30 TAC Chapter 115, Batch Processes	Control Device = Flare.
PROE6FE624	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	Control Device = Absorber.
PROE6FE624	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-02	30 TAC Chapter 115, Batch Processes	Control Device = Flare.
PROE6FE63	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	Control Device = Absorber.
PROE6FE63	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-02	30 TAC Chapter 115, Batch Processes	Control Device = Flare.
PROE6FE64	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-01	30 TAC Chapter 115, Batch Processes	Control Device = Absorber.
PROE6FE64	CHEMICAL MANUFACTURING PROCESS	N/A	R5160-02	30 TAC Chapter 115, Batch Processes	Control Device = Flare.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E3FE353	EP	R5121-22	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
E3FE353	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	Owners and operators of all affected sources shall reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(a) § 63.1426(b)(3) § 63.1429(a)(2) § 63.1429(a)(4) § 63.1429(c) § 63.1429(d)	§ 63.1430(b)(1) § 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)	§ 63.1430(g) § 63.1430(h)
E3FE355	EP	R5121-22	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
E3FE355	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	Owners and operators of all affected sources shall reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(a) § 63.1426(b)(3) § 63.1429(a)(2) § 63.1429(a)(4) § 63.1429(c) § 63.1429(d)	§ 63.1430(b)(1) § 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)	§ 63.1430(g) § 63.1430(h)
E3FE356	EP	R5121-22	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						title.			
E3FE356	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	Owners and operators of all affected sources shall reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(a) § 63.1426(b)(3) § 63.1429(a)(2) § 63.1429(a)(4) § 63.1429(c) § 63.1429(d)	§ 63.1430(b)(1) § 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)	§ 63.1430(g) § 63.1430(h)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(7)	screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery	§ 115.352(1)(A) § 115.352(1)	No open-ended valves or lines shall be allowed to	§ 115.354(1) § 115.354(2)	§ 115.352(7) § 115.356	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				& Petrochemicals	§ 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight,	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(8) § 115.357(9)	smell, or sound.			
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(8) § 115.357(12) § 115.357(8)	per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)	[G]§ 115.356(3)(C) § 115.356(5)	
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-	VOC	30 TAC Chapter	§ 115.352(1)(B)	No compressor seals	§ 115.354(1)	§ 115.352(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.357(4) § 115.357(8)	fluid based on sight, smell, or sound.			
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
E3FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E3LROSCW	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						this division, except as specified.			
E3LRSICW	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
E3NSCRB	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
E3TE3381	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E3TE3386	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E3TE3386	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.			
E3TE3387	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E3TE3388	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E3TE3388	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
E3TE3389	EU	R5112-00c	VOC	30 TAC Chapter	§ 115.111(a)(1)	Except as provided in §	[G]§ 115.117	§ 115.118(a)(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				115, Storage of VOCs		115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(5) § 115.118(a)(7)	
E3TE357	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						operations are exempt from the requirements of this division except §115.356(3)(C) of this title.			
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(8) § 115.357(9)	exuding of process fluid based on sight, smell, or sound.			
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)		
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10)	No flanges or other connectors shall be allowed to have a VOC	§ 115.354(1) § 115.354(10) § 115.354(11)	§ 115.352(7) § 115.354(10) § 115.356	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(8)				
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane,	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	or the dripping or exuding of process fluid based on sight, smell, or sound.			
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
E6FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
E6LR0SCW	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and	§ 115.217(a)(1) § 115.212(a)(2)	Vapor pressure (at land-based operations). All	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i)	§ 115.216 § 115.216(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Unloading of VOC	§ 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.215 § 115.215(4)	§ 115.216(3)(B)	
E6LR0SPC	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
E6LR0SPW	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
E6NSCRB	EP	R1111-01	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
E6SCRBTK	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E6TE614	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE614	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
E6TE6212	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE6212	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.			
E6TE6213	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE6214	EU	R115	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE628A	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE628A	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						(p) of this section, for the purposes of this subpart.			
E6TE628B	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE628B	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
E6TE632	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
E6TE632	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1532(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.			
E7RE9803	EU	R111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
FUG63PPP	EU	63PPP	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1420 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart PPP	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart PPP	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart PPP	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart PPP	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart PPP
GRPE3TK1	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPE3TK1	EU	63PPP	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.1152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.			
GRPE3TK2	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPE3TK3	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPE3TK3	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
GRPE3TK4	EU	R5112-00g	VOC	30 TAC Chapter	§ 115.111(a)(1)	Except as provided in §	[G]§ 115.117	§ 115.118(a)(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				115, Storage of VOCs		115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(5) § 115.118(a)(7)	
GRPE3TK4	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
GRPE6PV1	EP	R5121-20	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
GRPE6PV1	EP	R5121-22	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
GRPE6PV1	EP	R5121-226	VOC	30 TAC Chapter	§ 115.127(a)(4)(A)	Any SOCMI reactor	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				115, Vent Gas Controls	[G]§ 115.122(a)(4) § 115.127(a)(4)	process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.			
GRPE6PV1	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	Owners and operators of all affected sources shall reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(a) § 63.1426(b)(3) § 63.1429(a)(2) § 63.1429(a)(4) § 63.1429(c) § 63.1429(d)	§ 63.1430(b)(1) § 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)	§ 63.1430(g) § 63.1430(h)
GRPE6TK1	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPE6TK1	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
GRPE6TK2	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
GRPE6TK2	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)
GRPE6TK3	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPE6TK3	EU	63PPP	112(B)HAP	40 CFR Part 63, Subpart PPP	§ 63.1432(a) § 63.119(a)(3)	For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through	None	§ 63.123(a) § 63.123(b) § 63.123(d)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						(p) of this section, for the purposes of this subpart.			
PROE3FE353	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	None
PROE3FE355	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	None
PROE3FE356	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C)	The mass emission rate from individual process vents or for process vent streams in aggregate	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	[G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	
PROE6FE61	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	None
PROE6FE61	EU	R5160-02	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E) § 60.18(b)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable	§ 115.164(1) § 115.164(2) § 115.165(2)(C)(i) § 115.165(2)(C)(iii) § 115.165(2)(D) § 115.165(2)(E) § 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2)	§ 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						RACT equation.	§ 115.166(3) § 115.166(3)(B)		
PROE6FE62	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	None
PROE6FE62	EU	R5160-02	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E) § 60.18(b)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(2)(C)(i) § 115.165(2)(C)(iii) § 115.165(2)(D) § 115.165(2)(E) § 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	§ 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	None
PROE6FE624	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						flow rate value calculated using the applicable RACT equation.	§ 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166(3)(C)(i) § 115.166(3)(C)(iv)	
PROE6FE624	EU	R5160-02	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E) § 60.18(b)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(2)(C)(i) § 115.165(2)(C)(iii) § 115.165(2)(D) § 115.165(2)(E) § 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	§ 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	None
PROE6FE63	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	None
PROE6FE63	EU	R5160-02	VOC	30 TAC Chapter 115, Batch	§ 115.162(1) § 115.162(1)(A)	The mass emission rate from individual process	§ 115.164(1) § 115.164(2)	§ 115.166 § 115.166(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Processes	§ 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E) § 60.18(b)	vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.165(2)(C)(i) § 115.165(2)(C)(iii) § 115.165(2)(D) § 115.165(2)(E) § 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	§ 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	
PROE6FE64	EU	R5160-01	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(1) § 115.165(2) [G]§ 115.165(2)(A) [G]§ 115.165(2)(B) § 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	§ 115.166 § 115.166(1) § 115.166(1)(A) § 115.166(1)(A)(iii) § 115.166(1)(A)(iii)(I) § 115.166(1)(A)(iii)(II) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(C)(i) § 115.166(3)(C)(iv)	None
PROE6FE64	EU	R5160-02	VOC	30 TAC Chapter 115, Batch Processes	§ 115.162(1) § 115.162(1)(A) § 115.162(1)(B) § 115.162(1)(C) § 115.162(2) § 115.162(2)(B) § 115.162(2)(D) § 115.162(2)(E) § 60.18(b)	The mass emission rate from individual process vents or for process vent streams in aggregate within a batch process shall be reduced by 90% if the actual average flow rate value is below the flow rate value calculated using the applicable RACT equation.	§ 115.164(1) § 115.164(2) § 115.165(2)(C)(i) § 115.165(2)(C)(iii) § 115.165(2)(D) § 115.165(2)(E) § 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	§ 115.166 § 115.166(1) § 115.166(1)(B) [G]§ 115.166(2) § 115.166(3) § 115.166(3)(B)	None

Additional Monitoring Requirements

Periodic Monitoring Summary **59**

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: E3NSCRB	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Opacity of more than 20% will be considered a deviation.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: E6NSCRB	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Opacity of more than 20% will be considered a deviation.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Permit Shield

Permit Shield **62**

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
E3TE3388	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 40 cubic meters (10,567 gallons).
E6TE614	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
E6TE6212	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
E6TE628A	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
E6TE628B	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
E6TE632	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
GRPE3TK2	E3TE312, E3TE3128, E3TE313, E3TE314, E3TE3147, E3TE3148, E3TE3149, E3TE315, E3TE3150, E3TE3151, E3TE3152, E3TE3153,	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
	E3TE3154, E3TE3155, E3TE3358, E3TE3360, E3TE3361, E3TE3363, E3TE3364, E3TE3377, E3TE3378, E3TE3379, E3TE3380, E3TE344, E3TE391, E3TE392, E3TE393, E3TE394		
GRPE3TK4	E3TE3125, E3TE3374, E3TE3375, E3TE346, E3TE348	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
GRPE6PV1	E6FE61, E6FE62, E6FE624, E6FE63, E6FE64	40 CFR Part 60, Subpart RRR	Reactor process is designed and operated as a batch operation
GRPE6TK3	E6TE61, E6TE610, E6TE611, E6TE62, E6TE63, E6TE64, E6TE65, E6TE66, E6TE67, E6TE68, E6TE69	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
UEUL30	N/A	40 CFR Part 63, Subpart Q	Cooling tower is not operated with chromium-based water treatment chemicals

New Source Review Authorization References

New Source Review Authorization References 65

New Source Review Authorization References by Emission Unit 66

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 20134	Issuance Date: 02/11/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3FE353	REACTOR	20134
E3FE355	REACTOR	20134
E3FE356	REACTOR	20134
E3FUG	E3 UNIT FUGITIVES	20134
E3LROSCW	RAILCAR/TANKWAGON LOADING	20134
E3LRSICW	SI LOADING RACK	20134
E3NSCRB	E3 SCRUBBER	20134
E3TE3125	STORAGE TANK	20134
E3TE3128	STORAGE TANK	20134
E3TE312	INITIATOR TANK	20134
E3TE313	INITIATOR TANK	20134
E3TE3147	STORAGE TANK	20134
E3TE3148	STORAGE TANK	20134
E3TE3149	STORAGE TANK	20134
E3TE314	INITIATOR TANK	20134
E3TE3150	STORAGE TANK	20134
E3TE3151	ALCOHOL STORAGE TANK	20134
E3TE3152	STORAGE TANK	20134
E3TE3153	STORAGE TANK	20134
E3TE3154	STORAGE TANK	20134
E3TE3155	STORAGE TANK	20134

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3TE315	INITIATOR TANK	20134
E3TE3357	STORAGE TANK	20134
E3TE3358	STORAGE TANK	20134
E3TE3359	STORAGE TANK	20134
E3TE3360	STORAGE TANK	20134
E3TE3361	STORAGE TANK	20134
E3TE3362	STORAGE TANK	20134
E3TE3363	STORAGE TANK	20134
E3TE3364	STORAGE TANK	20134
E3TE3367	MNP STORAGE TANK	20134
E3TE3368	ALCOHOL STORAGE TANK	20134
E3TE3369	ALCOHOL STORAGE TANK	20134
E3TE3370	ALCOHOL STORAGE TANK	20134
E3TE3371	PRODUCT TANK	20134
E3TE3374	STORAGE TANK	20134
E3TE3375	STORAGE TANK	20134
E3TE3376	STORAGE TANK	20134
E3TE3377	STORAGE TANK	20134
E3TE3378	STORAGE TANK	20134
E3TE3379	DEG TANK	20134
E3TE3380	STORAGE TANK	20134

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3TE3381	E3 SCRUBBER CIRCULATION TANK	20134
E3TE3385	STORAGE TANK	20134
E3TE3386	STORAGE TANK	20134
E3TE3387	L-SERIES RAW MATERIAL TANK	20134
E3TE3388	LACTIC ACID STORAGE TANK	20134
E3TE3389	SI TANK	20134
E3TE344	STORAGE TANK	20134
E3TE345	STORAGE TANK	20134
E3TE346	STORAGE TANK	20134
E3TE347	STORAGE TANK	20134
E3TE348	STORAGE TANK	20134
E3TE357	STORAGE TANK	20134
E3TE391	STORAGE TANK	20134
E3TE392	STORAGE TANK	20134
E3TE393	STORAGE TANK	20134
E3TE394	STORAGE TANK	20134
E6FE61	REACTOR	20134
E6FE624	REACTOR	20134
E6FE62	REACTOR	20134
E6FE63	REACTOR	20134
E6FE64	REACTOR	20134

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E6FUG	E6 UNIT FUGITIVES	20134
E6LR0SCW	RAILCAR/TANKWAGON LOADING	20134
E6LR0SPC	RAILCAR LOADING	20134
E6LR0SPW	TANKWAGON LOADING	20134
E6NSCRB	E6 SCRUBBER	20134
E6SCRBTK	E6 SCRUBBER CIRCULATION TANK	20134
E6TE610	STORAGE TANK	20134
E6TE611	STORAGE TANK	20134
E6TE614	STORAGE TANK	20134
E6TE61	STORAGE TANK	20134
E6TE6212	STORAGE TANK	20134
E6TE6213	ACETIC ACID TANK	20134
E6TE6214	STORAGE TANK (CAUSTIC)	20134
E6TE628A	STORAGE TANK	20134
E6TE628B	STORAGE TANK	20134
E6TE62	STORAGE TANK	20134
E6TE632	STORAGE TANK	20134
E6TE633	STORAGE TANK	20134
E6TE634	STORAGE TANK	20134
E6TE635	STORAGE TANK	20134
E6TE636	TALLOW AMINE STORAGE TANK	20134

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E6TE637	T-2 STORAGE TANK	20134
E6TE638	PEG STORAGE TANK	20134
E6TE639	TAME-15 BLENDING TANK	20134
E6TE63	STORAGE TANK	20134
E6TE640	T-15 STORAGE TANK	20134
E6TE641	T-15 STORAGE TANK	20134
E6TE64	STORAGE TANK	20134
E6TE651	BLEND TANK	20134
E6TE65	STORAGE TANK	20134
E6TE66	STORAGE TANK	20134
E6TE67	STORAGE TANK	20134
E6TE68	STORAGE TANK	20134
E6TE69	STORAGE TANK	20134
E7RE9803	E7 FLARE	20134
FUG63PPP	FUGITIVES	20134
PROE3FE353	CHEMICAL MANUFACTURING PROCESS	20134
PROE3FE355	CHEMICAL MANUFACTURING PROCESS	20134
PROE3FE356	CHEMICAL MANUFACTURING PROCESS	20134
PROE6FE61	CHEMICAL MANUFACTURING PROCESS	20134
PROE6FE624	CHEMICAL MANUFACTURING PROCESS	20134
PROE6FE62	CHEMICAL MANUFACTURING PROCESS	20134

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
PROE6FE63	CHEMICAL MANUFACTURING PROCESS	20134
PROE6FE64	CHEMICAL MANUFACTURING PROCESS	20134
UEUL30	COOLING TOWER NO. 5	20134

Appendix A

Acronym List **73**

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
CEMS ..... continuous emissions monitoring system
CFR ..... Code of Federal Regulations
COMS ..... continuous opacity monitoring system
CVS ..... closed vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
SIP ..... state implementation plan
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Huntsman Petrochemical LLC

Site Name: Huntsman Port Neches
Area Name: E3/E6 Units
Physical Location: 2701 Spur 136
Nearest City: Port Neches
County: Jefferson

Permit Number: O2286
Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 32511
NAICS Name: Petrochemical Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: April 18, 2018

Operating Permit
Basis of Determination

Permit Area Process Description
E3 and E6 Units are part of Huntsman's Jefferson County Operations (JCO). JCO consists of several plants made up of many individual process units. In the E3 unit process, ethylene oxide is introduced into a kettle and is reacted. The E3 kettles are utilized for the production of surfactants in a batch process system. The duration of each batch process operation is approximately 5 to 12 hours. The kettle produces two types of surfactants: the L-series, and the N-series. The L-series produces alcohol ethoxylates, while the N-series produces alkyl phenyl ethoxylates. In addition, the E3 kettles also produce EO/PO block co-polymers (L-series).

In the E6 process, ethylene oxide is also introduced into a kettle, and is reacted. The E6 kettles are utilized for the production of surfactants in a batch process system. The duration of each batch process operation is approximately 4-12 hours. The kettle produces three types of surfactants: the L-series, the N-series, and the T-series. The L-series produces alcohol ethoxylates, the N-series produces alkyl phenyl ethoxylates, and the T-series produces tallow amine ethoxylates.

Finished products are stored in storage tanks at regulated temperatures. Products are shipped offsite in drums, railcar, or tank wagon.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1320, O2287, O2288, O3056

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO2, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone

    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting: The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions: The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary: The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement: The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have

sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References: All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan: A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements: This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list: This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are

burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

The applicant opted to comply with the more stringent 20% opacity standard under 30 TAC § 111.111(a)(1)(B) for all stationary vents that are subject to the 30% opacity standard under 30 TAC § 111.111(a)(1)(A).

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	No
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to

which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
E3TE3381	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E3TE3386	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
E3TE3386	40 CFR Part 60, Subpart Kb	60Kb-22	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
E3TE3386	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E3TE3387	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E3TE3388	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E3TE3388	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E3TE3389	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
E3TE3389	40 CFR Part 60, Subpart Kb	60Kb-22	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
E3TE357	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
E6SCRBTK	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E6SCRBTK	40 CFR Part 60, Subpart Kb	60Kb-2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
E6TE614	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E6TE614	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E6TE6212	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
E6TE6212	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E6TE6213	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E6TE6213	40 CFR Part 60, Subpart Kb	60Kb-3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
E6TE6214	30 TAC Chapter 115, Storage of VOCs	R115	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Construction Date = On or after May 12, 1973	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank using a submerged fill pipe Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E6TE628A	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
E6TE628A	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E6TE628B	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
E6TE628B	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E6TE632	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
E6TE632	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPE3TK1	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
GRPE3TK1	40 CFR Part 60, Subpart Kb	60Kb-4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
GRPE3TK1	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPE3TK2	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
GRPE3TK3	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
GRPE3TK3	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPE3TK4	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
GRPE3TK4	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPE6TK1	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
GRPE6TK1	40 CFR Part 60, Subpart Kb	60Kb-22	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
GRPE6TK1	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPE6TK2	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
GRPE6TK2	40 CFR Part 60, Subpart Kb	60Kb-4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPE6TK2	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPE6TK3	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
GRPE6TK3	40 CFR Part 63, Subpart PPP	63PPP	Vessel Type = Storage vessel.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E3LROSCW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
E3LRSICW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
E6LR0SCW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure less than 0.5 psia.	
E6LR0SPC	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
E6LR0SPW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
E7RE9803	30 TAC Chapter 111, Visible Emissions	R111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction on or before January 31, 1972.	
E3FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
E6FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
FUG63PPP	40 CFR Part 63, Subpart PPP	63PPP	Construction/Reconstruction = Affected source commenced construction/reconstruction after September 4, 1997.	
E3FE353	30 TAC Chapter 115, Vent	R5121-22	Alternate Control Requirement = Alternate control is not used.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Gas Controls		Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
E3FE353	40 CFR Part 63, Subpart PPP	63PPP	Construction/Reconstruction = Affected source commenced construction/reconstruction after September 4, 1997.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E3FE355	30 TAC Chapter 115, Vent Gas Controls	R5121-22	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
E3FE355	40 CFR Part 63, Subpart PPP	63PPP	Construction/Reconstruction = Affected source commenced construction/reconstruction after September 4, 1997.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E3FE356	30 TAC Chapter 115, Vent Gas Controls	R5121-22	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
E3FE356	40 CFR Part 63, Subpart PPP	63PPP	Construction/Reconstruction = Affected source commenced construction/reconstruction after September 4, 1997.	The rule citations were determined from an analysis of the rule text and the basis of determination.
E3NSCRB	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
E6NSCRB	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
GRPE6PV1	30 TAC Chapter 115, Vent Gas Controls	R5121-20	Alternate Control Requirement = Alternate control is not used. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
GRPE6PV1	30 TAC Chapter 115, Vent Gas Controls	R5121-22	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
GRPE6PV1	30 TAC Chapter 115, Vent Gas Controls	R5121-226	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPE6PV1	40 CFR Part 63, Subpart PPP	63PPP	Construction/Reconstruction = Affected source commenced construction/reconstruction after September 4, 1997.	The rule citations were determined from an analysis of the rule text and the basis of determination.
PROE3FE353	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	
PROE3FE355	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	
PROE3FE356	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Device = Absorber.	
PROE6FE61	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	
PROE6FE61	30 TAC Chapter 115, Batch Processes	R5160-02	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Flare.	
PROE6FE62	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PROE6FE62	30 TAC Chapter 115, Batch Processes	R5160-02	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Flare.	
PROE6FE624	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	
PROE6FE624	30 TAC Chapter 115, Batch Processes	R5160-02	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Flare.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
PROE6FE63	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	
PROE6FE63	30 TAC Chapter 115, Batch Processes	R5160-02	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Flare.	
PROE6FE64	30 TAC Chapter 115, Batch Processes	R5160-01	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Absorber.	
PROE6FE64	30 TAC Chapter 115, Batch Processes	R5160-02	Batch Process Annual Emission = The batch process train has total annual mass emissions from all combined vents greater than the	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			levels specified in 30 TAC § 115.167(2)(A). Single Unit Annual Mass Emissions = All single unit operations in the batch process operation have total annual mass emissions greater than 500 lbs/yr. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate control requirement demonstrating and documenting compliance or no alternate requirement has been requested. Aggregate Flow Rate = The actual average flow rate from the batch process vent streams, in aggregate, is below the calculated flow rate using the applicable RACT equation. Control Device = Flare.	

* - The “unit attributes” or operating conditions that determine what requirements apply
** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Registrations submitted by permittees are also available online through the link provided below. The following table specifies the permits by rule that apply to the site.

The status of air permits, applications, and Permits by Rule (PBR) registrations may be found by performing the appropriate search of the databases located at the following website:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 20134	Issuance Date: 02/11/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table” or “MAERT for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: E3NSCRB	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Opacity of more than 20% will be considered a deviation.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: E6NSCRB	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Opacity of more than 20% will be considered a deviation.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online ([HYPERLINK "https://www.tceq.texas.gov/goto/cfr-online"]). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at [HYPERLINK "https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

[HYPERLINK "https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html"]

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Historical Standard Exemption lists may be viewed at the following website:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

Additional information concerning PBRs is available on the TCEQ website:

[HYPERLINK "https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html"]

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on March 9, 2018.

Site rating: 17.31 / Satisfactory Company rating: 7.46 / Satisfactory
(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)

2. Has the permit changed on the basis of the compliance history or site/company rating? ..... No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? ..... No
2. Is a compliance plan and schedule included in the permit? ..... No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes

OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

Message

From: Donna Williams [donna.williams@tceq.texas.gov]
Sent: 2/26/2018 4:08:13 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Mike Wilson [mike.wilson@tceq.texas.gov]; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Tan Nguyen [Tan.Nguyen@tceq.texas.gov]; Alfredo Mendoza [alfredo.mendoza@tceq.texas.gov]
Subject: Texas Notification Report
Attachments: EPA_02-26-2018.rtf; O1131_BALL METAL BEVERAGE CONTAINER CORPORATION_SOB.docx; O1131_BALL METAL BEVERAGE CONTAINER CORPORATION_SOP.docx; O1573_SUNOCO PARTNERS MARKETING & TERMINALS LP_SOP.pdf; O1573_SUNOCO PARTNERS MARKETING & TERMINALS LP_SOB.docx; O1600_ACME BRICK COMPANY_SOP.docx; O1600_ACME BRICK COMPANY_SOB.docx; O1700_EL DORADO NITROGEN LLC_LTR.docx; O1700_EL DORADO NITROGEN LLC_SOB.docx; O1843_SABINE COGEN LP_SOB.docx; O1843_SABINE COGEN LP_SOP.docx; O2135_QUALITY ELECTRIC STEEL CASTINGS LP_SOB.docx; O2135_QUALITY ELECTRIC STEEL CASTINGS LP_SOP.docx; O2156_FREESTONE POWER GENERATION LLC_SOB.docx; O2156_FREESTONE POWER GENERATION LLC_SOP.pdf; O2221_THE DOW CHEMICAL COMPANY_SOB.docx; O2221_THE DOW CHEMICAL COMPANY_SOP.docx; O2266_GB BIOSCIENCES LLC_SOB.docx; O2266_GB BIOSCIENCES LLC_SOP.docx; O3484_CORONADO MIDSTREAM LLC_SOB.docx; O3484_CORONADO MIDSTREAM LLC_SOP.docx

Significant Project:
O2221 - THE DOW CHEMICAL COMPANY

Renewal Projects:
O1131 - BALL METAL BEVERAGE CONTAINER CORPORATION
O1573 - SUNOCO PARTNERS MARKETING & TERMINALS LP
O1600 - ACME BRICK COMPANY
O1700 - EL DORADO NITROGEN LLC
O1843 - SABINE COGEN LP
O2135 - QUALITY ELECTRIC STEEL CASTINGS LP
O2156 - FREESTONE POWER GENERATION LLC
O2266 - GB BIOSCIENCES LLC
O3484 - CORONADO MIDSTREAM LLC

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

The Dow Chemical Company

Site Name: Dow Texas Operations - Freeport
Area Name: Specialty Chemicals 2
Physical Location: 2301 N Brazosport Blvd
Nearest City: Freeport
County: Brazoria

Permit Number: O2221
Project Type: Significant Revision

The North American Industry Classification System (NAICS) Code: 32519
NAICS Name: Other Basic Organic Chemical Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the significant revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a significant permit revision per §§ 122.219-211. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: January 30, 2018

Operating Permit
Basis of Determination

Description of Revisions

- The following emission unit IDs, their corresponding applicable requirements, and preconstruction authorizations were added to the permit.
  - B39GMFU1, B39GMFU2, B39GMFU3 - 40 CFR Part 63, Subpart FFFF
  - B39GMLR1, B39GMLR2 - 30 TAC Chapter 115, Loading and Unloading of VOC
  - B39GMSP215, B39GMSP220, B39GMSP226, B39GMSP228, B39SP245, B39SP265 - 30 TAC Chapter 115, Water Separation
  - B39GMST264, B39GMST70A, B39GMST70B, B39GMST75A, B39GMST75B, B39GMST801, B39GMST828, B39GMWT257, B39ST285 - 30 TAC Chapter 115, Storage of VOCs
  - B39GMVH290 - 30 TAC Chapter 115, Vent Gas Controls and 40 CFR Part 63, Subpart FFFF
  - B39PT290 and B39RX210 - 30 TAC Chapter 115, Vent Gas Controls
  - PROGMA - 30 TAC Chapter 115, Subchapter E, Division 6 and 40 CFR Part 63, Subpart FFFF

- Existing Periodic Monitoring Summaries for B13PGD631, B13PGD660, B13SCPOLY, B17SV384, B43IPD141, B43IPR101A, B43IPR101B, B43IPRX1, and B43IPV132 for 30 TAC Chapter 115, Vent Gas Controls were revised to include a revised deviation limit and periodic monitoring text.

- New Source Review (NSR) permit number 104144 was added to the NSR Authorization References table.

Permit Area Process Description

Industrial Polyglycol - is made up of one 10,000 gallon reactor and other associated equipment where all the reactions occur. In addition, the plant includes two 10,000 gallon filter feed tanks, the spray chiller, a storage tank farm, and distribution facilities for such functions as drumming, bagging and loading. The process starts with an initiator containing an oxide in the presence of a catalyst and heat to produce a higher molecular weight polymer with physical properties desirable to the customer's specifications.

Polyglycol 1 - consists of seven kettle reactors ranging in size from 2,000 to 10,000 gallons, finishing systems, and storage tank farms. The process starts by charging a kettle with an initiator and a catalyst. The kettle is heated and fed a specific amount of oxide determined by the recipe of the product. As the oxide reacts down, the crude polyglycol is neutralized without removing the catalyst. The product is further filtered to remove remaining water and unreacted oxide. An eighth kettle is used to blend a base stock ester with antioxidants and corrosion inhibitors to produce three different compressor lubricants.

Aminoethylethanolamine (AEEA) - Ethylene oxide (EO) and excess ethylenediamine (EDA) are reacted to form AEEA. The reactor outlet stream passes through a soaker to act as a digestion stage to complete the oxide reaction. Water and excess EDA are removed through a stripping tray column and recycled to the EDA feed tank. Water with trace amounts of EDA is treated and analyzed at the Wastewater Treatment Plant.
The bottoms stream proceeds to a specified tower to separate the AEEA from heavier byproducts. The AEEA stream is condensed and stored for loading.

Methyldiethanolamine (MDEA) - EO is reacted with an excess of methyl amine (MA) to produce a mixture of monomethylethanolamine (MMEA) and MDEA. A small stream of carbon dioxide is charged to the MA feed tank to prevent formation of MDEA ethers in the reactor. The first separation packed tower removes excess MA from the reactor products. The bottom stream separates MMEA to send it back to the feed tanks. The MDEA product is condensed and transferred to the finish storage tank.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O2203, O2206, O2211, O2212, O2213, O2215, O2216, O2217, O2218, O2219, O2220, O2311, O2697, O3777, O3905, O3949

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO2, PM, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

The applicant opted to comply with the more stringent 20% opacity standard under 30 TAC § 111.111(a)(1)(B) for all stationary vents that are subject to the 30% opacity standard under 30 TAC § 111.111(a)(1)(A).

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the “Permit Shield” attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.

7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There

may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B13PGHE101	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Heat Exchanger subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGHE102	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Heat Exchanger subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGR2	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Process vent subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGR5	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Process vent subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGR7	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Process vent subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGR8	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Process vent subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGR9	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Process vent subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B43IPRX1	40 CFR Part 63, Subpart PPP	63PPP-01	Unit Type = Emission Point Process vent subject to 40 CFR Part 63, Subpart PPP	No DSS is available for this regulation. Citations were determined from an analysis of the rule text and the basis of determination.
B13PGST001	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST003	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST004	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B13PGST007	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B13PGST007	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B13PGST01	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST16C	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST16D	30 TAC Chapter	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	115, Storage of VOCs		documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST19	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST203	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST203	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
B13PGST204	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST204	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B13PGST21	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST21	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
B13PGST216	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST217	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST22	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B13PGST223	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST228	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST229	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST23	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B13PGST240	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST241	30 TAC Chapter	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	115, Storage of VOCs		documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST245	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST246	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST253	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST254	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			40,000 gallons	
B13PGST256	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B13PGST26	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST260	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST261	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST262	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST262	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
B13PGST265	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST266	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST268	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST269	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B13PGST27	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST28	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST3	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST306	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B13PGST308	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B13PGST309	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B13PGST40	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST41	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST44	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST45	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			25,000 gallons	
B13PGST501	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST506	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST508	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST55	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST56	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST57	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST58	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST661	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST663	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST664	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST668	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST669	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST671	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST701	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B13PGST702	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST703	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST803	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST870	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST871	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGST901	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B13PGSTT7A	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B17PEPT351	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B17PEPT351	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEPT352	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B17PEPT352	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEST012	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PEST012	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEST015	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PEST015	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEST01A	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PEST01A	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B17PEST364	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B17PEST364	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEST365	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B17PEST365	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEST371	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B17PEST371	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PEST372	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B17PEST372	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.	
B17PGST010	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGST010	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B17PGST011	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGST011	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B17PGST012	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B17PGST012	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B17PGST013	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGST013	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B17PGST014	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGST014	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B17PGST015	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGST015	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B17PGT201A	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGT201A	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B17PGT201B	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B17PGT201B	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B39GMST264	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B39GMST70A	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B39GMST70B	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B39GMST75A	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B39GMST75B	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B39GMST801	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B39GMST828	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B39GMWT257	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 40,000 gallons	
B39ST285	30 TAC Chapter 115, Storage of VOCs	R5112-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST03A	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B43IPST03B	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B43IPST104	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			40,000 gallons	
B43IPST105	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST106	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST107	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST108	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST109	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST111	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B43IPST113	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B43IPST114	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B43IPST117	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
B43IPST121	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST122	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST123	30 TAC Chapter 115, Storage of VOCs	R5111-01	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
B43IPST130	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
B13PGLR1	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
B13PGLR1	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-02	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. Control Options = Vapor balance system.	
B13PGLR1	40 CFR Part 63, Subpart G	63G-01	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.	
B13PGLR2	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
B13PGLR2	40 CFR Part 63, Subpart G	63G-01	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.	
B39GMLR1	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = Using the 90% overall control option specified in 30 TAC § 115.213(b). Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 and less than 11.0 psia, the overall emission controls are at least 90%, and an initial control plan and annual report has been submitted. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B39GMLR2	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
B43IPLR1	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
B13PGFU1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
B13PGFU1	40 CFR Part 60, Subpart VV	60VV-ALL	SOP Index No. = Owner or operator assumes fugitive unit control requirements for all components in VOC service subject to 40 CFR Part 60, Subpart VV with no alternate control or control devices.	
B13PGFU1	40 CFR Part 63, Subpart FFFF	63FFFF-ALL	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.	
B13PGFU1	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.	
B17PEFU01	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
B17PEFU01	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.	
B17PGFU2	30 TAC Chapter 115, Pet. Refinery &	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Petrochemicals			
B17PGFU2	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.	
B39GMFU1	40 CFR Part 63, Subpart FFFF	63FFFF-01	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.	
B39GMFU2	40 CFR Part 63, Subpart FFFF	63FFFF-01	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.	
B39GMFU3	40 CFR Part 63, Subpart FFFF	63FFFF-01	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.	
B43IPFU1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.	
B43IPFU1	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.	
B13PGHE60	40 CFR Part 63, Subpart FFFF	63FFFF-01	Monitoring = The cooling water is being monitored for the presence of HAPs or other representative substances that would indicate a leak.	
B39GMSP215	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
B39GMSP220	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
B39GMSP226	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
B39GMSP228	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
B39SP245	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
B39SP265	30 TAC Chapter 115, Water Separation	R5131-01	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.	
B13PGD530	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B13PGD530	30 TAC Chapter 115, Vent Gas Controls	R5121-02	Alternate Control Requirement = Alternate control is not used. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B13PGD530	40 CFR Part 63, Subpart FFFF	63FFFF-01	Designated Grp1 = The emission stream is designated as Group 1. Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i. Hal Device Type = No halogen scrubber or other halogen reduction device is used. Meets 63.988(b)(2) = The control device meets criteria in § 63.985(b)(2). Small Device = A small control device (defined in § 63.2550) is not being used. Designated Hal = The emission stream is not designated as halogenated. Prior Eval = The data from a prior evaluation or assessment is not used.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested. Determined Hal = The emission stream is determined to be non-halogenated. Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested. Formaldehyde = The stream does not contain formaldehyde. Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure. CEMS = A CEMS is not used. SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel.	
B13PGD631	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B13PGD660	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B13PGPT34	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGPT601	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGRX1	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGS955	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST2	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST201	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST202	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST224	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST225	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST226	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
B13PGST227	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST242	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST243	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST244	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST607	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST662	30 TAC Chapter 115, Vent Gas	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Controls		Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST67	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGST850	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
B13PGSV2	40 CFR Part 63, Subpart FFFF	63FFFF-01	Emission Standard = The vent stream is Group 2 (not designated as Group 1 and determined to not be Group 1). Recovery Device = The TRE index is maintained using a recovery device. Existing Source = The source is an existing source (commenced construction on or before April 4, 2002). TRE Index Threshold = The TRE index is greater than the applicable threshold (i.e., 5.0 for existing source or 8.0 for new source).	
B13PGVJ3	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B13PGVJ3	30 TAC Chapter 115, Vent Gas Controls	R5121-02	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B13SCPOLY	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B17SV384	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.	
B17SV384	40 CFR Part 63, Subpart G	63G-01	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Absorber used as a recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is greater than or equal to 50 ppm. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). MACT TRE Index Value = TRE index value is greater than 1.0 and less than or equal to 4.0 as calculated using the procedures of 40 CFR § 63.115(d).	
B39GMVH290	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
B39GMVH290	40 CFR Part 63, Subpart FFFF	63FFFF-01	Emission Standard = The vent stream is Group 2 (not designated as Group 1 and determined to not be Group 1). Recovery Device = The TRE index is maintained using a recovery device. Existing Source = The source is an existing source (commenced construction on or	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			before April 4, 2002). TRE Index Threshold = The TRE index is greater than the applicable threshold (i.e., 5.0 for existing source or 8.0 for new source).	
B39PT290	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
B39RX210	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
B43IPD141	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B43IPR101A	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B43IPR101B	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B43IPRX1	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B43IPV132	30 TAC Chapter 115, Vent Gas Controls	R5121-01	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.	
B43V132A	30 TAC Chapter 115, Vent Gas	R5121-01	Alternate Control Requirement = Alternate control is not used.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Controls		Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
PROGMA	30 TAC Chapter 115, Subchapter E, Division 6	R5460-01	Exemptions = The operation, process, or equipment is one which is specified in 115.461(d)(1)-(17).	
PROIPG	30 TAC Chapter 115, Subchapter E, Division 6	R5460-01	Exemptions = No exemption is being met. Alternate Control Requirement = Alternate control not used. Compliance Demonstration = Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied. Minor Modification = Using the methods in §115.468(a)(1)-(3).	
PROIPG	30 TAC Chapter 115, Subchapter E, Division 6	R5460-02	Exemptions = No exemption is being met. Alternate Control Requirement = Alternate control not used. Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit). Minor Modification = Using the methods in §115.468(a)(1)-(3).	
PROPGA	30 TAC Chapter 115, Subchapter E, Division 6	R5460-01	Exemptions = No exemption is being met. Alternate Control Requirement = Alternate control not used. Compliance Demonstration = Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied. Minor Modification = Using the methods in §115.468(a)(1)-(3).	
PROPGA	30 TAC Chapter 115, Subchapter E, Division 6	R5460-02	Exemptions = No exemption is being met. Alternate Control Requirement = Alternate control not used. Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit). Minor Modification = Using the methods in §115.468(a)(1)-(3).	
PROPGE	30 TAC Chapter 115, Subchapter	R5460-01	Exemptions = No exemption is being met.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	E, Division 6		Alternate Control Requirement = Alternate control not used. Compliance Demonstration = Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied. Minor Modification = Using the methods in §115.468(a)(1)-(3).	
PROPGE	30 TAC Chapter 115, Subchapter E, Division 6	R5460-02	Exemptions = No exemption is being met. Alternate Control Requirement = Alternate control not used. Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit). Minor Modification = Using the methods in §115.468(a)(1)-(3).	
PROGMA	40 CFR Part 63, Subpart FFFF	63FFFF-01	>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr. Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less. Startup 2003 = The affected source startup was before November 10, 2003. Other Operations = The MCPU includes operations other than those listed in § 63.2435(c). Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63. 63.100 CMPU = The MCPU is not a CMPU defined in § 63.100. New Source = The MCPU is an existing affected source. PUG = The MCPU is not part of a process unit group (PUG). G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. Startup 2002 = The affected source initial startup was before April 4, 2002. PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7. Batch Process Vents = The source does not include batch process vents.	
PROPGA	40 CFR Part 63, Subpart FFFF	63FFFF-01	>1000 lb/yr = The process has uncontrolled hydrogen halide and halogen HAP emissions from process vents of less than 1,000 lb/yr. Ammonium Sulfate = The MCPU does not include the manufacture of ammonium sulfate as a by-product, or the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less. Startup 2003 = The affected source startup was before November 10, 2003. Other Operations = The MCPU includes operations other than those listed in § 63.2435(c). Shared Batch Vent = The MCPU does not include a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			63.100 CMPU = The MCPU is not a CMPU defined in § 63.100. New Source = The MCPU is an existing affected source. PUG = The MCPU is not part of a process unit group (PUG). G2/<1000 lb/yr = The process does not include Group 2 batch process vents and/or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. Startup 2002 = The affected source initial startup was before April 4, 2002. PP Alt = The MCPU is complying with the emission limitations and work practice standards contained in Tables 1 through 7. Batch Process Vents = The source does not include batch process vents.	
PROPGE	40 CFR Part 63, Subpart F	63F-01	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.	

* - The “unit attributes” or operating conditions that determine what requirements apply
** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 104144	Issuance Date: 04/20/2017
Authorization No.: 18561	Issuance Date: 12/15/2011
Authorization No.: 75751	Issuance Date: 08/16/2007
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission

point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: B13PGD631	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 5 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B13PGD631	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B13PGD660	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 5 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B13PGD660	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B13SCPOLY	
Control Device ID No.: B13PGSV3	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 10 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B13SCPOLY	
Control Device ID No.: B13PGSV3	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B17SV384	
Control Device ID No.: B17SV384	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 450 gallons per hour	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B17SV384	
Control Device ID No.: B17SV384	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment	

Unit/Group/Process Information	
ID No.: B39GMVH290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid flow rate shall be no less than 300 gallons per hour.	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: B39GMVH290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Inlet Temperature	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid Flow Inlet Temperature: 60 degrees Celsius	
Basis of monitoring: The scrubber effluent used is once-through water over a packed column for maximum surface contact with process gases. The temperature of the water has a direct relationship to the solubility of the chemicals in the process gases.	

Unit/Group/Process Information	
ID No.: B39PT290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Inlet Temperature	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid Flow Inlet Temperature: 60 degrees Celsius	
Basis of monitoring: The scrubber effluent used is once-through water over a packed column for maximum surface contact with process gases. The temperature of the water has a direct relationship to the solubility of the chemicals in the process gases.	

Unit/Group/Process Information	
ID No.: B39PT290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid flow rate shall be no less than 300 gallons per hour.	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: B39RX210	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid flow rate shall be no less than 300 gallons per hour.	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

Unit/Group/Process Information	
ID No.: B39RX210	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Inlet Temperature	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid Flow Inlet Temperature: 60 degrees Celsius	
Basis of monitoring: The scrubber effluent used is once-through water over a packed column for maximum surface contact with process gases. The temperature of the water has a direct relationship to the solubility of the chemicals in the process gases.	

Unit/Group/Process Information	
ID No.: B43IPD141	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B43IPD141	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B43IPR101A	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B43IPR101A	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B43IPR101B	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B43IPR101B	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B43IPRX1	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B43IPRX1	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Unit/Group/Process Information	
ID No.: B43IPV132	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Basis of monitoring: The option to monitor the liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: B43IPV132	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and recorded in a log. This option ensures that the owner or operator is adequately maintaining the control equipment.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on January 8, 2018.
   Site rating: 0.00 / High Company rating: 0.57 / Satisfactory
   (High < 0.10; Satisfactory ≥ 0.10 and < 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? ..... No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes

OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
The Dow Chemical Company

AUTHORIZING THE OPERATION OF
Dow Texas Operations - Freeport
Specialty Chemicals 2
Other Basic Organic Chemical Manufacturing

LOCATED AT
Brazoria County, Texas
Latitude 28° 58' 57" Longitude 95° 21' 10"
Regulated Entity Number: RN100225945

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O2221 Issuance Date: December 17, 2014

For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]**Special Terms and Conditions:**

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

   A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

   B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

   C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

   D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

   E. Emission units subject to 40 CFR Part 63, Subparts F, G, H, PPP and FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter

113, Subchapter C, § 113.110, § 113.120, § 113.130, § 113.730, and § 113.890 respectively which incorporate the 40 CFR Part 63 Subparts by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

   A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

   B. Title 30 TAC § 101.3 (relating to Circumvention)

   C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

   D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

   E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

   F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

   G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

   H. Title 30 TAC § 101.221 (relating to Operational Requirements)

   I. Title 30 TAC § 101.222 (relating to Demonstrations)

   J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

   A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed either before or after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

      (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

      (ii) Title 30 TAC § 111.111(a)(1)(E)

      (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

      (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that

does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the

applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be

evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

(i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)

(ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)

(iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

   A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

   B. Title 40 CFR § 60.8 (relating to Performance Tests)

   C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

   D. Title 40 CFR § 60.12 (relating to Circumvention)

   E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

   F. Title 40 CFR § 60.14 (relating to Modification)

   G. Title 40 CFR § 60.15 (relating to Reconstruction)

   H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

7. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

8. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General)

   B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

   C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

9. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. General Leak Detection Requirements:

      (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

(ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

(iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

B. For closed vent system or vapor collection systems constructed of hard piping:

(i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements

10. For the Off-Site Waste and Recovery Operations specified in 40 CFR Part 63, Subpart DD, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.350 incorporated by reference):

A. Requirements specified with reference to 40 CFR Part 63, Subpart A:

(i) Title 40 CFR § 63.680(f) for applicability of the General Provisions of Subpart A

(ii) Title 40 CFR § 63.696(a) (relating to Recordkeeping Requirements)

(iii) Title 40 CFR § 63.697(a) (relating to Reporting Requirements)

11. For the Off-Site Waste and Recovery Operations specified in 40 CFR Part 63, Subpart DD, at sites where the total annual quantity of HAP in the off-site material received is less than 1 megagram per year, the permit holder shall comply with the requirements of 40 CFR § 63.680(d)(1) - (3) (Title 30 TAC Chapter 113, Subchapter C, § 113.350 incorporated by reference).

12. For process unit PROPGA subject to the Group 2 wastewater stream requirements in 40 CFR Part 63, Subpart PPP, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.730 incorporated by reference):

A. Title 40 CFR § 63.105(b) - (e) (relating to Maintenance Wastewater Requirements), as required by Title 40 CFR § 63.1433(b) and (b)(1) - (3)

B. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General) as required by Title 40 CFR § 63.1433(a)

C. Title 40 CFR § 63.1439(a) - (e) (relating to General Recordkeeping and Reporting Requirements)

13. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

14. For miscellaneous chemical process facilities with Group 2 wastewater streams subject to wastewater operations requirements in 40 CFR Part 63, Subpart FFFF, the permit holder shall

comply with the requirements of 40 CFR § 63.132(a), (a)(1), (a)(1)(i), and (a)(3) as specified in § 63.2485(a) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

15. For the transfer of site remediation materials subject to 40 CFR Part 63, Subpart GGGGG off-site to another facility, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1160 incorporated by reference):

    A. Title 40 CFR § 63.7936(a), for the transfer of site remediation materials

    B. Title 40 CFR § 63.7936(b)(1), for transfer to a landfill or land disposal unit

    C. Title 40 CFR § 63.7936(b)(2), for transfer to a facility subject to 40 CFR Part 63, Subpart DD

    D. Title 40 CFR § 63.7936(b)(3), (b)(3)(i) - (iv), for transfer to a facility managing the site remediation material according to the requirements of 40 CFR Part 63, Subpart GGGGG

16. For containers managing remediation materials subject to 40 CFR Part 63, Subpart GGGGG, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.1160 incorporated by reference):

    A. Title 40 CFR § 63.922(b)(1) - (3), (c), (d), (d)(1) - (5), (e), and (f), (f)(1) - (4) (relating to Standards - Container Level 1 Controls)

    B. Title 40 CFR § 63.923(b)(1) - (3), (c), (d), (d)(1) - (5), (e), and (f), (f)(1) - (4) (relating to Standards - Container Level 2 Controls)

    C. Title 40 CFR § 63.925(a)(1) - (8), and (b)(1) - (3) (relating to Test Methods and Procedures)

    D. Title 40 CFR § 63.926(a)(1) - (3) (relating to Inspection and Monitoring Requirements)

    E. Title 40 CFR § 63.7901(b) and (b)(1), for initial demonstration of compliance

    F. Title 40 CFR § 63.7901(b)(2), for initial demonstration of compliance

    G. Title 40 CFR § 63.7901(c), (c)(1), and (c)(2), for initial demonstration of compliance

    H. Title 40 CFR § 63.7901(d), and (d)(1) - (4), for initial demonstration of compliance

    I. Title 40 CFR § 63.7903(b) and (b)(1), for continuous demonstration of compliance

    J. Title 40 CFR § 63.7903(b)(2), (b)(2)(i), (b)(2)(ii), for continuous demonstration of compliance

    K. Title 40 CFR § 63.7903(c)(4), (c)(4)(i), and (c)(4)(ii), for continuous demonstration of compliance

    L. Title 40 CFR § 63.7903(d)(5), (d)(5)(i), and (d)(5)(ii), for continuous demonstration of compliance

    M. Title 40 CFR § 63.7952(c), for recordkeeping

Additional Monitoring Requirements

17. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

18. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

19. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

20. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.

    A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.

    B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

21. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

22. Use of Emission Credits to comply with applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) Offsets for Title 30 TAC Chapter 116

    B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)

        (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

        (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)

        (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

23. Use of Discrete Emission Credits to comply with the applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) If applicable, offsets for Title 30 TAC Chapter 116

        (iv) Temporarily exceed state NSR permit allowables

    B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Risk Management Plan

24. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

25. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

B. The permit holder shall comply with 40 CFR Part 82, Subpart A for controlling the production, transformation, destruction, export or import of a controlled (ozone-depleting) substance or product as specified in 40 CFR § 82.1 - § 82.13 and the applicable Part 82 Appendices.

C. The permit holder shall comply with 40 CFR Part 82, Subpart A, § 82.13 related to recordkeeping and reporting requirements for the production and consumption of ozone depleting substances.

Permit Location

26. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

27. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than

90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary **16**

Applicable Requirements Summary **33**

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGD530	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	Control Device ID No. = B19G1T210.
B13PGD530	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-02	30 TAC Chapter 115, Vent Gas Controls	Control Device ID No. = B34VMTO210.
B13PGD530	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
B13PGD631	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGD660	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGFU1	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
B13PGFU1	FUGITIVE EMISSION UNITS	N/A	60VV-ALL	40 CFR Part 60, Subpart VV	No changing attributes.
B13PGFU1	FUGITIVE EMISSION UNITS	N/A	63FFFF-ALL	40 CFR Part 63, Subpart FFFF	No changing attributes.
B13PGFU1	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
B13PGHE101	INDUSTRIAL PROCESS COOLING TOWERS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGHE102	INDUSTRIAL PROCESS COOLING TOWERS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGHE60	INDUSTRIAL PROCESS COOLING TOWERS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGLR1	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia., Transfer Type = Only loading.
B13PGLR1	LOADING/UNLOADING OPERATIONS	N/A	R5211-02	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized., Chapter 115 Control Device Type = No control device., Transfer Type = Only unloading., Control Options = Vapor balance system., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
B13PGLR1	LOADING/UNLOADING OPERATIONS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B13PGLR2	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
B13PGLR2	LOADING/UNLOADING OPERATIONS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B13PGPT34	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGPT601	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGR2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGR5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGR7	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGR8	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGR9	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B13PGRX1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGS955	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST001	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST003	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST004	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST007	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGST01	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST16C	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST16D	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST19	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST201	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST202	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST203	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST204	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST21	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST216	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST217	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST22	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGST223	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST224	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST225	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST226	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST227	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST228	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST229	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST23	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST240	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST241	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST242	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST243	EMISSION POINTS/STATIONARY	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
B13PGST244	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST245	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST246	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST253	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST254	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST256	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST26	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST260	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST261	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST262	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST265	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST266	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST268	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGST269	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST27	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST28	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST3	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST306	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST308	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST309	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST40	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST41	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST44	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST45	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST501	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST506	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST508	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGST55	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST56	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST57	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST58	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST607	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST661	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST662	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST663	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST664	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST668	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST669	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST67	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST671	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B13PGST701	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST702	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST703	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST803	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST850	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B13PGST870	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST871	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGST901	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGSTT7A	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B13PGSV2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
B13PGVJ3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	Control Device ID No. = B13PGSV3.
B13PGVJ3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-02	30 TAC Chapter 115, Vent Gas Controls	Control Device ID No. = B34VMTO210.
B13SCPOLY	EMISSION	N/A	R5121-01	30 TAC Chapter 115, Vent	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			Gas Controls	
B17PEFU01	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
B17PEFU01	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
B17PEPT351	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEPT351	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEPT352	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEPT352	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST012	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEST012	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST015	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEST015	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST01A	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEST01A	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST364	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B17PEST364	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST365	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEST365	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST371	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEST371	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PEST372	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PEST372	STORAGE TANKS/VESSELS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B17PGFU2	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
B17PGFU2	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
B17PGST010	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PGST011	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PGST012	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PGST013	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PGST014	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B17PGST015	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PGT201A	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17PGT201B	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B17SV384	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B17SV384	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-01	40 CFR Part 63, Subpart G	No changing attributes.
B39GMFU1	FUGITIVE EMISSION UNITS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
B39GMFU2	FUGITIVE EMISSION UNITS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
B39GMFU3	FUGITIVE EMISSION UNITS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
B39GMLR1	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
B39GMLR2	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
B39GMSP215	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
B39GMSP220	VOLATILE ORGANIC COMPOUND WATER	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	SEPARATORS				
B39GMSP226	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
B39GMSP228	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
B39GMST264	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMST70A	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMST70B	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMST75A	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMST75B	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMST801	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMST828	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B39GMVH290	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B39GMVH290	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
B39GMWT257	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B39PT290	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B39RX210	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B39SP245	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
B39SP265	VOLATILE ORGANIC COMPOUND WATER SEPARATORS	N/A	R5131-01	30 TAC Chapter 115, Water Separation	No changing attributes.
B39ST285	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPD141	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B43IPFU1	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
B43IPFU1	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
B43IPLR1	LOADING/UNLOADING OPERATIONS	N/A	R5211-01	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
B43IPR101A	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B43IPR101B	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B43IPRX1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B43IPRX1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63PPP-01	40 CFR Part 63, Subpart PPP	No changing attributes.
B43IPST03A	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST03B	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST104	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST105	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST106	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST107	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST108	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST109	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST111	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST113	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST114	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B43IPST117	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST121	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST122	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPST123	STORAGE TANKS/VESSELS	N/A	R5111-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
B43IPV132	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B43V132A	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PROGMA	CLEANING/DEPAINTING OPERATION	N/A	R5460-01	30 TAC Chapter 115, Subchapter E, Division 6	No changing attributes.
PROGMA	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROIPG	CLEANING/DEPAINTING OPERATION	N/A	R5460-01	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied.
PROIPG	CLEANING/DEPAINTING OPERATION	N/A	R5460-02	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).
PROPGA	CLEANING/DEPAINTING	N/A	R5460-01	30 TAC Chapter 115,	Compliance Demonstration =

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	OPERATION			Subchapter E, Division 6	Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied.
PROPGA	CLEANING/DEPAINTING OPERATION	N/A	R5460-02	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).
PROPGA	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-01	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROPGE	CLEANING/DEPAINTING OPERATION	N/A	R5460-01	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting VOC content of the cleaning solution to 0.42 lb VOC/gal of solution, as applied.
PROPGE	CLEANING/DEPAINTING OPERATION	N/A	R5460-02	30 TAC Chapter 115, Subchapter E, Division 6	Compliance Demonstration = Limiting the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).
PROPGE	CHEMICAL MANUFACTURING PROCESS	N/A	63F-01	40 CFR Part 63, Subpart F	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGD530	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(A)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
B13PGD530	EP	R5121-02	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(A)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
B13PGD530	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5)	For each Group 1continuous process vent, the owner or operator must reduce emissions of total organic HAP by >98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare).	[G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3)	§ 63.2450(k)(6) § 63.2525(g) § 63.2525(h) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5)	§ 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) [G]§ 63.999(c)(2) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d)		§ 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H)		
B13PGD631	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B13PGD660	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery	§ 115.357(6)	Components at a petroleum refinery or synthetic organic	None	§ 115.356 § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				& Petrochemicals		chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.		[G]§ 115.356(3)(C)	
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the requirements of this division except §115.356(3)(C) of this title.			
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
B13PGFU1	EU	R5352-	VOC	30 TAC Chapter	§ 115.352(1)(A)	No process drains shall be	§ 115.354(1)	§ 115.352(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	[G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B13PGFU1	EU	R5352-	VOC	30 TAC Chapter	§ 115.352(1)(A)	No valves shall be allowed	§ 115.354(1)	§ 115.352(7)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight,	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(8)	smell, or sound.			
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(1) § 115.357(12) § 115.357(8)				
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.			
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B13PGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	but not specifically selected for alternative work practice monitoring.	[G]§ 115.358(e) § 115.358(f)		
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	§ 60.482-1(d)	Equipment that is in vacuum service is excluded from the requirements of §60.482-2 to §60.482-10, if it is identified as required in §60.486(e)(5).	None	§ 60.486(e) § 60.486(e)(1) § 60.486(e)(5)	None
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-2 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pumps in light liquid service shall comply with the requirements outlined in § 60.482-2(a)-(f).	[G]§ 60.482-2 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-3 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Compressors shall comply with the requirements outlined in § 60.482-3(a)-(j).	[G]§ 60.482-3 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-6 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Open-ended valves or lines shall comply with the requirements outlined in § 60.482-6(a)-(c).	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-7 § 60.482-1(a) § 60.482-1(b)	Valves in gas/vapor service and in light liquid service shall comply with the	[G]§ 60.482-7 [G]§ 60.483-1 [G]§ 60.483-2	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.482-9 [G]§ 60.483-1 [G]§ 60.483-2	requirements outlined in § 60.482-7(a)-(h).	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j)	§ 60.487(d) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	§ 60.482-4(a) § 60.482-1(a) § 60.482-1(b) § 60.482-4(b)(1) § 60.482-4(b)(2) § 60.482-4(d)(1) § 60.482-4(d)(2) [G]§ 60.482-9	Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background.	§ 60.482-4(b)(1) § 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pumps in heavy liquid service shall comply with the requirements of §60.482-8(a)-(d).	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pressure relief devices in light-liquid service shall comply with the requirements of §60.482-8(a)-(d).	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pressure relief devices in heavy liquid service shall comply with the requirements of §60.482-8(a)-(d).	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a)	Flanges and other connectors shall comply	[G]§ 60.482-8 § 60.485(a)	[G]§ 60.486(a) [G]§ 60.486(b)	§ 60.487(a) [G]§ 60.487(b)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(b) [G]§ 60.482-9	with the requirements of §60.482-8(a)-(d).	[G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Valves in heavy liquid service shall comply with the requirements of §60.482-8(a)-(d).	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	60VV-ALL	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-5 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Sampling connection systems shall be in compliance with the requirements outlined in § 60.482-5(a)-(c).	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
B13PGFU1	EU	63FFFF-ALL	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(f)	§ 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a)	Standards: Connectors in gas/vapor service and in	[G]§ 63.174 [G]§ 63.180(b)	§ 63.181(a) [G]§ 63.181(b)	[G]§ 63.182(a) [G]§ 63.182(b)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	light liquid service. §63.174(a)-(j)	[G]§ 63.180(d)	§ 63.181(c) [G]§ 63.181(d)	§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B13PGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGHE101	EU	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1435(a) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.1435(b) § 63.1435(e)	The owner or operator of each affected source shall comply with the requirements of §63.104 for heat exchange systems, with the exceptions noted in paragraphs (b) through (e) of this section.	[G]§ 63.104(b) [G]§ 63.104(c) § 63.1435(c)	[G]§ 63.104(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) § 63.1435(c)	[G]§ 63.104(f)(2) § 63.1435(c) § 63.1435(d)
B13PGHE102	EU	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1435(a) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.1435(b) § 63.1435(e)	The owner or operator of each affected source shall comply with the requirements of §63.104 for heat exchange systems, with the exceptions noted in paragraphs (b) through (e) of this section.	[G]§ 63.104(b) [G]§ 63.104(c) § 63.1435(c)	[G]§ 63.104(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) § 63.1435(c)	[G]§ 63.104(f)(2) § 63.1435(c) § 63.1435(d)
B13PGHE60	EU	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2490(a)-Table10 § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.2490(a) § 63.2490(b) § 63.2490(c)	For each heat exchange system, as defined in §63.101, comply with the requirements of §63.104 and the requirements referenced therein except as specified in §63.2490.	[G]§ 63.104(b)	[G]§ 63.104(e)(2) [G]§ 63.104(f)(1)	[G]§ 63.104(f)(2)
B13PGLR1	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
B13PGLR1	EU	R5211-02	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A)	All land-based VOC transfer to or from transport vessels shall be conducted in the	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i)	None

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					§ 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	manner specified for leak-free operations.	§ 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216(3)(A)(iii)	
B13PGLR1	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
B13PGLR2	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
B13PGLR2	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
B13PGPT34	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGPT601	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGR2	EP	63PPP-01	112(B) HAP	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1(a) § 63.1(b)(2) § 63.1(b)(3) § 63.1(c)(4) § 63.1(c)(5) § 63.1(e) § 63.4 § 63.5(a) § 63.5(b) § 63.5(d)(1)(ii) § 63.5(d)(1)(iii) § 63.5(d)(3) § 63.5(d)(4) § 63.5(e) § 63.5(f) § 63.6(a) § 63.6(b)(1) § 63.6(b)(2) § 63.6(b)(3) § 63.6(b)(4) § 63.6(b)(5) § 63.6(e) § 63.6(f) § 63.6(g) § 63.6(h) § 63.6(i) § 63.6(j) § 63.6(f) § 63.1422(f) § 63.1422(g)	For existing affected sources, the owner or operator shall Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.8(b) § 63.8(c)(1) § 63.8(c)(2) § 63.8(c)(3) § 63.1426(b)(4)(ii) § 63.1429(a)(3) § 63.1429(b)(4)(ii) § 63.1429(d)	§ 63.9(a) § 63.9(c) § 63.9(d) § 63.9(i) § 63.1439(a) § 63.1439(b) § 63.1439(c) § 63.1439(d)	§ 63.10(d)(2) § 63.10(d)(4) § 63.1430(g)(1) § 63.1439(c) § 63.1439(e)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.1425(a)				
B13PGR5	EP	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	For existing affected sources, the owner or operator shall Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(b)(6) § 63.1426(f)(vi) § 63.1429(a)(4) § 63.1429(d) § 63.1438(a) § 63.1438(d) § 63.1438(e)(2) § 63.1438(e)(iii) § 63.1438(f)(1) § 63.1438(g)	§ 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)(1) § 63.1430(d)(2) § 63.1430(d)(5) § 63.1438(d) § 63.1439(a) § 63.1439(b)(1) § 63.1439(c) § 63.1439(d)	§ 63.1430(h)(1) § 63.1430(h)(2) § 63.1438(a)(2) § 63.1438(d) § 63.1439(b)(1)(ii) § 63.1439(c) § 63.1439(e)
B13PGR7	EP	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	For existing affected sources, the owner or operator shall Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(b)(6) § 63.1426(f)(vi) § 63.1429(a)(4) § 63.1429(d) § 63.1438(a) § 63.1438(d) § 63.1438(e)(2) § 63.1438(e)(iii) § 63.1438(f)(1) § 63.1438(g)	§ 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)(1) § 63.1430(d)(2) § 63.1430(d)(5) § 63.1438(d) § 63.1439(a) § 63.1439(b)(1) § 63.1439(c) § 63.1439(d)	§ 63.1430(h)(1) § 63.1430(h)(2) § 63.1438(a)(2) § 63.1438(d) § 63.1439(b)(1)(ii) § 63.1439(c) § 63.1439(e)
B13PGR8	EP	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	For existing affected sources, the owner or operator shall Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(b)(6) § 63.1426(f)(vi) § 63.1429(a)(4) § 63.1429(d) § 63.1438(a) § 63.1438(d) § 63.1438(e)(2) § 63.1438(e)(iii) § 63.1438(f)(1) § 63.1438(g)	§ 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)(1) § 63.1430(d)(2) § 63.1430(d)(5) § 63.1438(d) § 63.1439(a) § 63.1439(b)(1) § 63.1439(c) § 63.1439(d)	§ 63.1430(h)(1) § 63.1430(h)(2) § 63.1438(a)(2) § 63.1438(d) § 63.1439(b)(1)(ii) § 63.1439(c) § 63.1439(e)
B13PGR9	EP	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1(a) § 63.1(b)(2) § 63.1(b)(3) § 63.1(c)(4) § 63.1(c)(5)	For existing affected sources, the owner or operator shall Reduce the total epoxide emissions from the group of applicable process vents by an	§ 63.8(b) § 63.8(c)(1) § 63.8(c)(2) § 63.8(c)(3) § 63.1426(b)(4)(ii) § 63.1429(a)(3)	§ 63.9(a) § 63.9(c) § 63.9(d) § 63.9(i) § 63.1439(a) § 63.1439(b)	§ 63.10(d)(2) § 63.10(d)(4) § 63.1430(g)(1) § 63.1439(c) § 63.1439(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.1(e) § 63.4 § 63.5(a) § 63.5(b) § 63.5(d)(1)(ii) § 63.5(d)(1)(iii) § 63.5(d)(3) § 63.5(d)(4) § 63.5(e) § 63.5(f) § 63.6(a) § 63.6(b)(1) § 63.6(b)(2) § 63.6(b)(3) § 63.6(b)(4) § 63.6(b)(5) § 63.6(e) § 63.6(f) § 63.6(g) § 63.6(h) § 63.6(i) § 63.6(j) § 63.6(f) § 63.1422(f) § 63.1422(g) § 63.1425(a)	aggregated 98 percent.	§ 63.1429(b)(4)(ii) § 63.1429(d)	§ 63.1439(c) § 63.1439(d)	
B13PGRX1	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGS955	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).			
B13PGST001	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST003	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST004	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST007	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST01	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST16C	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
B13PGST16D	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST19	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST2	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST201	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST202	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).			
B13PGST203	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST204	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST21	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST216	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST217	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST22	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(6)(A) § 115.118(a)(7)	
B13PGST22 3	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST22 4	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST22 5	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST22 6	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST22 7	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4)	A vent gas stream having a combined weight of volatile	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Controls	§ 115.127(a)(2)	organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).		§ 115.126(4)	
B13PGST228	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST229	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST23	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST240	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST241	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST242	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST243	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST244	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST245	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST246	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST253	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST254	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST256	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST26	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST260	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST261	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST262	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST265	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST266	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST268	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST269	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST27	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST28	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST3	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST306	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST308	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST309	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B13PGST40	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST41	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST44	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST45	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST501	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST506	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST508	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST55	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST56	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST57	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST58	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST607	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST661	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						psia is exempt from the requirements of this division.			
B13PGST662	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST663	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST664	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST668	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST669	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST67	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4)	A vent gas stream having a combined weight of volatile	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Controls	§ 115.127(a)(2)	organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).		§ 115.126(4)	
B13PGST671	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST701	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST702	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST703	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST803	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B13PGST850	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
B13PGST870	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST871	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGST901	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGSTT7A	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B13PGSV2	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(b) § 63.2455(b)(1) § 63.2455(b)(2) § 63.2455(b)(3)	For each continuous process vent, you must either designate the vent as a Group 1 continuous	§ 63.115(d) [G]§ 63.115(d)(1) § 63.115(d)(2) § 63.115(d)(2)(i)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1)-(3) of this section.	[G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) § 63.115(d)(3)(i) § 63.115(d)(3)(ii)		
B13PGVJ3	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(A)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
B13PGVJ3	EP	R5121-02	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(A)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
B13SCPOLY	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.			
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.			
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the dropping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(8) § 115.357(9)	sound.			
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	the dropping or exuding of process fluid based on sight, smell, or sound.			
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-	VOC	30 TAC Chapter	§ 115.352(1)(B)	No compressor seals shall	§ 115.354(1)	§ 115.352(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.357(1) § 115.357(8)				
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PEFU01	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a)	Equipment that is in organic HAP service less than 300	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b)	[G]§ 63.182(a) [G]§ 63.182(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(c) [G]§ 63.162(g) § 63.162(h)	hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).		§ 63.181(c) [G]§ 63.181(i) § 63.181(j)	
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEFU01	EU	63H-ALL	112(B)	40 CFR Part 63,	[G]§ 63.168	Standards: Valves in	[G]§ 63.168	§ 63.181(a)	[G]§ 63.182(a)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PEPT35 1	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B17PEPT35 1	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
B17PEPT35 2	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B17PEPT35 2	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B17PEST01 2	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PEST01 2	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
B17PEST01 5	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PEST01 5	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
B17PEST01 A	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PEST01 A	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						in §63.123(a). Not required to comply with §63.119 to §63.123.			
B17PEST364	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B17PEST364	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
B17PEST365	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B17PEST365	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
B17PEST371	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B17PEST37	EU	63G-01	112(B)	40 CFR Part 63,	§ 63.119(a)(3)	Group 2 tanks not using	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
1			HAPS	Subpart G		emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.			
B17PEST372	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B17PEST372	EU	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PGFU2	EU	R5352-	VOC	30 TAC Chapter	§ 115.357(5)	Reciprocating compressors	None	§ 115.356	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals		and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.		§ 115.356(3) [G]§ 115.356(3)(C)	
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk	None	§ 115.356 § 115.356(3)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				& Petrochemicals		must comply with §115.352(9) and §115.356(3)(C).		[G]§ 115.356(3)(C)	
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7)	million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)		
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10)	No valves shall be allowed to have a VOC leak, for more than 15 days after	§ 115.354(1) § 115.354(10) § 115.354(2)	§ 115.352(7) § 115.354(10) § 115.356	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10)	No agitators shall be allowed to have a VOC leak, for more than 15 days after	§ 115.354(1) § 115.354(10) § 115.354(5)	§ 115.352(7) § 115.354(10) § 115.356	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	based on sight, smell, or sound.			
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B17PGFU2	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(f)	§ 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a)	Standards: Connectors in gas/vapor service and in	[G]§ 63.174 [G]§ 63.180(b)	§ 63.181(a) [G]§ 63.181(b)	[G]§ 63.182(a) [G]§ 63.182(b)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	light liquid service. §63.174(a)-(j)	[G]§ 63.180(d)	§ 63.181(c) [G]§ 63.181(d)	§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B17PGFU2	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B17PGST010	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PGST011	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PGST012	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PGST013	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PGST014	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PGST015	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B17PGT201 A	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17PGT201 B	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B17SV384	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(2) § 115.122(a)(2) § 115.122(a)(2)(B)	No person may allow a vent gas stream to be emitted from the processes specified in §115.121(a)(2)(A)-(E), unless the vent gas stream is controlled properly in accordance with §115.122(a)(2).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B17SV384	EP	63G-01	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(d) [G]§ 63.115(f)	Group 2 process with specified criteria shall maintain a TRE index value >1 and shall comply with specified sections.	§ 63.114(b) § 63.114(b)(1) § 63.114(e) [G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.114(b) § 63.114(b)(1) [G]§ 63.117(a)(7) § 63.117(a)(8) [G]§ 63.152(a)	§ 63.114(e) § 63.115(e)(2) [G]§ 63.117(a)(7) § 63.117(a)(8) § 63.118(f)(1) [G]§ 63.118(g) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(g) § 63.151(h) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii) [G]§ 63.152(c)(6)
B39GMFU1	EU	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF
B39GMFU2	EU	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF
B39GMFU3	EU	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF

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					CFR Part 63, Subpart FFFF				
B39GMLR1	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.213(b) § 115.212(a)(2) § 115.212(a)(3)(B) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.213(b)(1) § 115.213(b)(4) [G]§ 115.213(b)(6) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(ii)	General loading - 90% overall control option in the covered non-attainment counties. As an alternative operations may elect to achieve a 90% overall control of emissions at the account.	§ 115.212(a)(3)(B) § 115.213(b) § 115.213(b)(1) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.213(b)(1) § 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	§ 115.213(b)(1) § 115.213(b)(2) § 115.213(b)(3) § 115.213(b)(4)
B39GMLR2	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
B39GMSP215	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
B39GMSP220	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None

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						§115.132(a).			
B39GMSP226	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
B39GMSP228	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
B39GMST264	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B39GMST70A	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B39GMST70B	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B39GMST75	EU	R5112-01	VOC	30 TAC Chapter	§ 115.111(a)(1)	Except as provided in §	[G]§ 115.117	§ 115.118(a)(1)	None

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A				115, Storage of VOCs		115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	
B39GMST75B	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B39GMST801	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B39GMST828	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B39GMVH290	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B39GMVH290	EP	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2455(b) § 63.2455(b)(1)	For each continuous process vent, you must	§ 63.115(d) [G]§ 63.115(d)(1)	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.2455(b)(2) § 63.2455(b)(3)	either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1)-(3) of this section.	§ 63.115(d)(2) § 63.115(d)(2)(i) [G]§ 63.115(d)(2)(ii) § 63.115(d)(2)(iii) § 63.115(d)(2)(iv) § 63.115(d)(3)(i) § 63.115(d)(3)(ii)		
B39GMWT257	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B39PT290	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B39RX210	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B39SP245	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
B39SP265	EU	R5131-01	VOC	30 TAC Chapter 115, Water Separation	§ 115.137(a)(2) [G]§ 115.132(a)(4)	Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure of VOC < .5 psia obtained from any equipment is exempt from §115.132(a).	[G]§ 115.135(a) § 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	§ 115.136(a)(1) § 115.136(a)(3) § 115.136(a)(4)	None
B39ST285	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPD141	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.			
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery	§ 115.357(13)	Components/systems that contact a process fluid	None	§ 115.356 § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				& Petrochemicals		containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.		[G]§ 115.356(3)(C)	
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(1)	background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.		[G]§ 115.356(3)(C) § 115.356(5)	
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(12) § 115.357(8) § 115.357(9)	based on sight, smell, or sound.			
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)		
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10)	No agitators shall be allowed to have a VOC leak, for more than 15 days after	§ 115.354(1) § 115.354(10) § 115.354(5)	§ 115.352(7) § 115.354(10) § 115.356	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight,	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	smell, or sound.			
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
B43IPFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
B43IPFU1	EU	63H-ALL	112(B)	40 CFR Part 63,	§ 63.162(e)	Equipment that is in organic	[G]§ 63.180(d)	§ 63.181(a)	[G]§ 63.182(a)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).		[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(b)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(i)	§ 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.171				[G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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B43IPFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
B43IPLR1	EU	R5211-01	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
B43IPR101A	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B43IPR101B	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B43IPRX1	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	** See Periodic Monitoring Summary		
B43IPRX1	EP	63PPP-01	112(B) HAPS	40 CFR Part 63, Subpart PPP	§ 63.1425(b)(2)(ii) § 63.1425(a) § 63.1425(b)	For existing affected sources, the owner or operator shall Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent.	§ 63.1426(b)(6) § 63.1426(f)(vi) § 63.1429(a)(4) § 63.1429(d) § 63.1438(a) § 63.1438(d) § 63.1438(e)(2) § 63.1438(e)(iii) § 63.1438(f)(1) § 63.1438(g)	§ 63.1430(b)(2)(i) § 63.1430(c) § 63.1430(d)(1) § 63.1430(d)(2) § 63.1430(d)(5) § 63.1438(d) § 63.1439(a) § 63.1439(b)(1) § 63.1439(c) § 63.1439(d)	§ 63.1430(h)(1) § 63.1430(h)(2) § 63.1438(a)(2) § 63.1438(d) § 63.1439(b)(1)(ii) § 63.1439(c) § 63.1439(e)
B43IPST03A	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B43IPST03B	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B43IPST104	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST105	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of this division.			
B43IPST106	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST107	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST108	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST109	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST111	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B43IPST113	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of this division.			
B43IPST114	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B43IPST117	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
B43IPST121	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST122	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPST123	EU	R5111-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
B43IPV132	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						properly in accordance with §115.122(a)(1) of this title.	Monitoring Summary		
B43V132A	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
PROGMA	PRO	R5460-01	VOC	30 TAC Chapter 115, Subchapter E, Division 6	[G]§ 115.461(d) [G]§ 115.463(c)	The following are exempt from the VOC limits in §115.463(a) of this title (relating to Control Requirements): §115.461(d)(1)-(17)	None	§ 115.468(b)(2) § 115.468(b)(5)	None
PROGMA	PRO	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PROIPG	PRO	R5460-01	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(1) [G]§ 115.463(c)	The owner or operator shall limit the volatile organic compounds (VOC) content of cleaning solutions to 0.42 pound of VOC per gallon of solution (lb VOC/gal solution), as applied.	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(4) § 115.468(b)(5)	None
PROIPG	PRO	R5460-02	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(2) [G]§ 115.463(c)	The owner or operator shall limit the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(4) § 115.468(b)(5)	None
PROPGA	PRO	R5460-01	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(1) [G]§ 115.463(c)	The owner or operator shall limit the volatile organic compounds (VOC) content of cleaning solutions to 0.42 pound of VOC per gallon of solution (lb VOC/gal solution), as applied.	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(4) § 115.468(b)(5)	None
PROPGA	PRO	R5460-02	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(2) [G]§ 115.463(c)	The owner or operator shall limit the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(4) § 115.468(b)(5)	None
PROPGA	PRO	63FFFF-01	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.2525(f) § 63.2525(j)	§ 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PROPGE	PRO	R5460-01	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(1) [G]§ 115.463(c)	The owner or operator shall limit the volatile organic compounds (VOC) content of cleaning solutions to 0.42 pound of VOC per gallon of solution (lb VOC/gal solution), as applied.	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(4) § 115.468(b)(5)	None
PROPGE	PRO	R5460-02	VOC	30 TAC Chapter 115, Subchapter E, Division 6	§ 115.463(a)(2) [G]§ 115.463(c)	The owner or operator shall limit the composite partial vapor pressure of the cleaning solution to 8.0 millimeters of mercury at 20 degrees Celsius (68 degrees Fahrenheit).	[G]§ 115.465(1)	§ 115.468(b)(1) § 115.468(b)(4) § 115.468(b)(5)	None
PROPGE	PRO	63F-01	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a)	Except as provided in paragraphs (b)(4) and (c) of	§ 63.103(b)(1) § 63.103(b)(3)	[G]§ 63.103(c) [G]§ 63.104(e)(2)	§ 63.103(b)(2) [G]§ 63.103(b)(5)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	[G]§ 63.103(d) [G]§ 63.104(f)(2)

Additional Monitoring Requirements

Periodic Monitoring Summary **127**

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B13PGD631	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 5 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B13PGD631	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B13PGD660	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 5 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B13PGD660	
Control Device ID No.: B13PGSV22	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B13SCPOLY	
Control Device ID No.: B13PGSV3	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 10 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B13SCPOLY	
Control Device ID No.: B13PGSV3	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B17SV384	
Control Device ID No.: B17SV384	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 450 gallons per hour	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B17SV384	
Control Device ID No.: B17SV384	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B39GMVH290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid flow rate shall be no less than 300 gallons per hour.	
Periodic Monitoring Text: Measure and record the liquid flow rate. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B39GMVH290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Inlet Temperature	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid Flow Inlet Temperature: 60 degrees Celsius	
Periodic Monitoring Text: Measure and record the liquid flow inlet temperature. Establish a maximum liquid flow inlet temperature using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. Any monitoring data above the maximum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B39PT290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Inlet Temperature	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid Flow Inlet Temperature: 60 degrees Celsius	
Periodic Monitoring Text: Measure and record the liquid flow inlet temperature. Establish a maximum liquid flow inlet temperature using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. Any monitoring data above the maximum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B39PT290	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid flow rate shall be no less than 300 gallons per hour.	
Periodic Monitoring Text: Measure and record the liquid flow rate. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B39RX210	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid flow rate shall be no less than 300 gallons per hour.	
Periodic Monitoring Text: Measure and record the liquid flow rate. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B39RX210	
Control Device ID No.: B39GMSV290	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Liquid Inlet Temperature	
Minimum Frequency: once per week	
Averaging Period: n/a	
Deviation Limit: Liquid Flow Inlet Temperature: 60 degrees Celsius	
Periodic Monitoring Text: Measure and record the liquid flow inlet temperature. Establish a maximum liquid flow inlet temperature using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. Any monitoring data above the maximum limit shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPD141	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPD141	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPR101A	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPR101A	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPR101B	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPR101B	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPRX1	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPRX1	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPV132	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Liquid flow rate	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: 4 gallons per minute	
Periodic Monitoring Text: Measure and record the liquid flow rate. Establish a minimum liquid flow rate using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B43IPV132	
Control Device ID No.: B43IPSV1	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Once per month	
Averaging Period: n/a	
Deviation Limit: Any inspection data which indicates that the scrubber is not in compliance with 115.121(a)(1).	
Periodic Monitoring Text: A monthly visual inspection of the scrubber inlet piping and outlet piping for cracks or leaks will be done monthly. Records shall be maintained of the visual inspections. Any defects detected in the scrubbing system shall be documented and repaired as soon as practicable.	

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGE32	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGE32	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR1	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR1	N/A	40 CFR Part 60, Subpart RRR	Not an SOCMI chemical reactor process
B13PGR2	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR2	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR3	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR3	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR5	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR5	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR6	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR6	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR7	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR7	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR8	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR8	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGR9	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor
B13PGR9	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B13PGST001	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST001	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST001	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST001	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST001	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST001	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST001	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST001	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST003	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST003	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST003	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST003	N/A	40 CFR Part 61, Subpart FF	Does not store or contain benzene waste
B13PGST003	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST003	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP
B13PGST003	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST003	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST004	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST004	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST004	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST004	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST004	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST004	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST004	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST007	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B13PGST007	N/A	40 CFR Part 61, Subpart FF	Does not store or contain benzene waste
B13PGST007	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST007	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP
B13PGST007	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST007	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST01	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST01	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST01	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST01	N/A	40 CFR Part 61, Subpart FF	Does not store or contain benzene waste
B13PGST01	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST01	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST01	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST16C	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST16C	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST16C	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST16C	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST16C	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST16C	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST16C	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST16D	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST16D	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST16D	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST16D	N/A	40 CFR Part 61, Subpart FF	Does not store or contain benzene waste
B13PGST16D	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST16D	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST16D	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST19	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST19	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST19	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST19	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST19	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST19	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST19	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST201	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP
B13PGST202	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP
B13PGST203	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B13PGST203	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B13PGST203	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST203	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST203	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST203	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP
B13PGST203	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST203	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST204	N/A	40 CFR Part 60, Subpart K	Storage capacity <40,000 gallons
B13PGST204	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B13PGST204	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19800 gallons
B13PGST204	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST204	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST204	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP
B13PGST204	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST204	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST21	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B13PGST21	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B13PGST21	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST21	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST21	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST21	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST21	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST216	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST216	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST216	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST216	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST216	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST216	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST216	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST217	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST217	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST217	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST217	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST217	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST217	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST217	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST22	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST22	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST22	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST22	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST22	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST22	N/A	40 CFR Part 63, Subpart FFFF	Does not store organic HAP

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST22	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST22	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST222	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST223	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST223	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST223	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is < 19,800 gallons
B13PGST223	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST223	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST223	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST223	N/A	40 CFR Part 63, Subpart G	Not an SOCMI facility
B13PGST223	N/A	40 CFR Part 63, Subpart OO	No applicable subpart within 60, 61, or 63 reference this subpart
B13PGST224	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST225	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST226	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST227	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST228	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST228	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST228	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST228	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST228	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST228	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST228	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST229	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST229	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST229	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST229	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST229	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST229	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST229	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST229	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST23	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST23	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST23	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST23	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST23	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST23	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST23	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST23	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST240	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST240	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST240	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST240	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST240	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST240	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST240	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST240	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST241	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST241	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST241	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST241	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST241	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST241	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST241	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST242	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST243	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST244	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST245	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST245	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST245	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST245	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST245	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST245	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST245	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST245	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST246	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST246	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST246	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST246	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST246	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST246	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST246	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST253	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST253	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST253	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST253	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST253	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST253	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST253	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST254	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST254	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST254	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST254	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST254	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST254	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST254	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST256	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST256	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST256	N/A	40 CFR Part 60, Subpart Kb	Storage capacity <19,800 gallons
B13PGST256	N/A	40 CFR Part 61, Subpart FF	Does not store or contain benzene waste
B13PGST256	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST256	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST256	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST26	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST26	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST26	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST26	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST26	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST26	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST26	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST260	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST260	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST260	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST260	N/A	40 CFR Part 61, Subpart FF	Does not contain or store Benzene waste
B13PGST260	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST260	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST260	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST261	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST261	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST261	N/A	40 CFR Part 60, Subpart Kb	Storage capacity <19,800 gallons
B13PGST261	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST261	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST261	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST261	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST262	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST262	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B13PGST262	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST262	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST262	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST262	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST262	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST265	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST265	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST265	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST265	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST265	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST265	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST265	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST266	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST266	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST266	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST266	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST266	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST266	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST266	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST268	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST268	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST268	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST268	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST268	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST268	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST268	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST269	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST269	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST269	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST269	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST269	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST269	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST269	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST27	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST27	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST27	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST27	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST27	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST27	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST27	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST28	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST28	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST28	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST28	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST28	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST28	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST28	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST3	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST3	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST3	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST3	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST3	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST3	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST3	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST306	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST306	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST306	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST306	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST306	N/A	40 CFR Part 61, Subpart Y	Does not store benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST306	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST306	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST308	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST308	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST308	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST308	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST308	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST308	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST308	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST308	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST309	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGST309	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGST309	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST309	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST309	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST309	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST309	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST40	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST40	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST40	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST40	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST40	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST40	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST40	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST40	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST41	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST41	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST41	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST41	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST41	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST41	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST41	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST41	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST44	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST44	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST44	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST44	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST44	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST44	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST44	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST45	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST45	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST45	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST45	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST45	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST45	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST45	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST45	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST501	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST501	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST501	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST501	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST501	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST501	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST501	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST506	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST506	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST506	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST506	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST506	N/A	40 CFR Part 61, Subpart Y	Does not store benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST506	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST506	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST508	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST508	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST508	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST508	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST508	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST508	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST508	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST55	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST55	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST55	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST55	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST55	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST55	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST55	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST55	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST56	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST56	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST56	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST56	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST56	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST56	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST56	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST56	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST57	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST57	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST57	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST57	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST57	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST57	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST57	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST58	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST58	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST58	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST58	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST58	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST58	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST58	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST661	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST661	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST661	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST661	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST661	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST661	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST661	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST662	N/A	40 CFR Part 63, Subpart FFFF	Surge control vessel which does not meet the definition of a Group 1 storage tank.
B13PGST663	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST663	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST663	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST663	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene
B13PGST663	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST663	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST663	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST663	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST664	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST664	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST664	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST664	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST664	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST664	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST664	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST664	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST668	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST668	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST668	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST668	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST668	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST668	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST668	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST668	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST669	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST669	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST669	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST669	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST669	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST669	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST669	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST669	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST671	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST671	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST671	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST671	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST671	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST671	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST671	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST701	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST701	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST701	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST701	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST701	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST701	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility.
B13PGST701	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST702	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST702	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST702	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST702	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST702	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST702	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST702	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST703	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST703	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST703	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST703	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST703	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST703	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B13PGST703	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST703	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST803	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST803	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST803	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST803	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST803	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST803	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST803	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST870	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B13PGST870	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B13PGST870	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B13PGST870	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste

Permit Shield

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGST870	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST870	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST870	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST871	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B13PGST871	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B13PGST871	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B13PGST871	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST871	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST871	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST871	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGST901	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B13PGST901	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B13PGST901	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B13PGST901	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGST901	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGST901	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGST901	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGSTT7A	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B13PGSTT7A	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B13PGSTT7A	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B13PGSTT7A	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B13PGSTT7A	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B13PGSTT7A	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B13PGSTT7A	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B13PGT11	N/A	40 CFR Part 60, Subpart NNN	Not a SOCMI chemical distillation process
B13PGT12	N/A	40 CFR Part 60, Subpart NNN	Not a SOCMI chemical distillation process
B13PGT13	N/A	40 CFR Part 60, Subpart NNN	Not a SOCMI chemical distillation process
B13PGT20	N/A	40 CFR Part 60, Subpart NNN	Not a SOCMI chemical distillation process
B13PGT21	N/A	40 CFR Part 60, Subpart NNN	Not a SOCMI chemical distillation process
B17PEPT351	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEPT351	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEPT351	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B17PEPT351	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEPT352	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEPT352	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEPT352	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B17PEPT352	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST012	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEST012	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEST012	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure <3.5 kPa

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B17PEST012	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST012	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PEST015	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B17PEST015	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B17PEST015	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure <3.5 kPa
B17PEST015	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST015	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PEST01A	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B17PEST01A	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B17PEST01A	N/A	40 CFR Part 60, Subpart Kb	Maximum true vapor pressure <3.5 kPa
B17PEST01A	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST01A	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PEST364	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEST364	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEST364	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B17PEST364	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST365	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEST365	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEST365	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B17PEST365	N/A	40 CFR Part 61, Subpart Y	Does not store benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B17PEST365	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PEST371	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEST371	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEST371	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B17PEST371	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST371	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PEST372	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B17PEST372	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B17PEST372	N/A	40 CFR Part 60, Subpart Kb	Storage capacity < 19,800 gallons
B17PEST372	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PEST372	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGFU2	N/A	40 CFR Part 60, Subpart VV	Not an affected facility producing chemicals listed in 60.489
B17PGST010	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGST010	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGST010	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGST010	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B17PGST010	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGST011	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGST011	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGST011	N/A	40 CFR Part 61, Subpart Y	Does not store benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B17PGST011	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B17PGST011	N/A	40 CFR Part 63, Subpart G	Not A SOCMI facility
B17PGST011	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGST012	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGST012	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGST012	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGST012	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B17PGST012	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B17PGST012	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGST013	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGST013	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGST013	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGST013	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B17PGST013	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B17PGST013	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGST014	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGST014	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGST014	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGST014	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B17PGST014	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B17PGST014	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGST015	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGST015	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGST015	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGST015	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B17PGST015	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B17PGST015	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGT201A	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGT201A	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGT201A	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGT201A	N/A	40 CFR Part 63, Subpart FFFF	Does not store OHAP
B17PGT201A	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B17PGT201A	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B17PGT201B	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B17PGT201B	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B17PGT201B	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B17PGT201B	N/A	40 CFR Part 63, Subpart G	Not SOCMI facility
B17PGT201B	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPFU1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed or modified after 01/05/1981
B43IPRX1	N/A	40 CFR Part 60, Subpart III	Not an air oxidation reactor

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B43IPRX1	N/A	40 CFR Part 60, Subpart RRR	Not a SOCMI chemical reactor process
B43IPST03A	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST03A	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST03A	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST03A	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST03A	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST03A	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST03A	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST03B	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST03B	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST03B	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST03B	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST03B	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST03B	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST03B	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST104	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST104	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST104	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST104	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST104	N/A	40 CFR Part 61, Subpart Y	Does not store benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B43IPST104	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST104	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST105	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST105	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST105	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST105	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST105	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST105	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST105	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST106	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST106	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST106	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST106	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST106	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST106	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST106	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST107	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST107	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST107	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST107	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B43IPST107	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST107	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST107	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST108	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST108	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST108	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST108	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST108	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST108	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST108	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST109	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST109	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST109	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST109	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST109	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST109	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST109	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST111	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST111	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST111	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B43IPST111	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST111	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST111	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST111	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST113	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST113	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST113	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST113	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST113	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST113	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST113	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST114	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST114	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids
B43IPST114	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST114	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST114	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST114	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST114	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST117	N/A	40 CFR Part 60, Subpart K	Does not store petroleum liquids
B43IPST117	N/A	40 CFR Part 60, Subpart Ka	Does not store petroleum liquids

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B43IPST117	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST117	N/A	40 CFR Part 60, Subpart Y	Does not store benzene
B43IPST117	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST117	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST117	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST121	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B43IPST121	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B43IPST121	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST121	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST121	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST121	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST121	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST122	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons
B43IPST122	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B43IPST122	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST122	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST122	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST122	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST122	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST123	N/A	40 CFR Part 60, Subpart K	Storage capacity is < 40,000 gallons

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B43IPST123	N/A	40 CFR Part 60, Subpart Ka	Storage capacity is < 40,000 gallons
B43IPST123	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST123	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST123	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST123	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST123	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST127	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
B43IPST127	N/A	40 CFR Part 60, Subpart K	Storage capacity < 40,000 gallons
B43IPST127	N/A	40 CFR Part 60, Subpart Ka	Storage capacity < 40,000 gallons
B43IPST127	N/A	40 CFR Part 60, Subpart Kb	Design capacity < 19,800 gallons
B43IPST127	N/A	40 CFR Part 60, Subpart Y	Does not store benzene
B43IPST127	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST127	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST127	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart
B43IPST130	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
B43IPST130	N/A	40 CFR Part 60, Subpart Kb	VOC TVP < 0.5 psia
B43IPST130	N/A	40 CFR Part 61, Subpart FF	Does not contain or store benzene waste
B43IPST130	N/A	40 CFR Part 61, Subpart Y	Does not store benzene
B43IPST130	N/A	40 CFR Part 63, Subpart G	Not a SOCMI facility
B43IPST130	N/A	40 CFR Part 63, Subpart OO	No applicable subparts within 60, 61, or 63 reference this subpart

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit 190

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 104144	Issuance Date: 04/20/2017
Authorization No.: 18561	Issuance Date: 12/15/2011
Authorization No.: 75751	Issuance Date: 08/16/2007
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B13PGD530	D-530 KNOCK OUT POT	18561
B13PGD631	D-631 T-21 TOWER REFLUX DRUM	18561
B13PGD660	D-660 T-20 TOWER REFLUX DRUM	18561
B13PGE32	E-32 REACTOR	18561
B13PGFU1	AREA FUGITIVES (POLY MDEA AEEA)	18561, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000, 106.476/09/04/2000, 106.478/09/04/2000
B13PGHE101	E-101 HEAT EXCHANGER	18561
B13PGHE102	E-102 HEAT EXCHANGER	18561
B13PGHE60	E-60 HEAT EXCHANGER	18561
B13PGLR1	POLY#1/AEEA RAILCAR LOADING	18561, 75751, 106.261/11/01/2003, 106.262/11/01/2003
B13PGLR2	POLY#1/AEEA TANK TRUCK" LOADING	18561, 75751, 106.261/11/01/2003, 106.262/11/01/2003
B13PGPT34	D-34 PROCESS VESSEL	18561
B13PGPT601	D-601 MIXING POT	18561
B13PGR1	KR-1 REACTOR	18561
B13PGR2	KR-2 REACTOR	18561
B13PGR3	KR-3 REACTOR	18561, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000, 106.476/09/04/2000, 106.478/09/04/2000
B13PGR5	KR-5 REACTOR	18561
B13PGR6	KR-6 PROCESS VESSEL	18561
B13PGR7	KR-7 REACTOR	18561
B13PGR8	KR-8 REACTOR	18561

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B13PGR9	KR-9 REACTOR	18561
B13PGRX1	POLYGLYCOL AMINES TANK VENT	18561
B13PGS955	PGA REACTOR SYS 4 STRIPPER PROCESS" VENT	18561
B13PGST001	D-1001 POLYGLYCOL STORAGE TANK	18561
B13PGST003	D-2003 POLYGLYCOL STORAGE TANK	18561
B13PGST004	D-2004 STORAGE TANK	18561
B13PGST007	D-2007 POLYGLYCOL STORAGE TANK	18561
B13PGST01	D-201 OLOA PROCESS VESSEL	18561
B13PGST16C	D-16C WASH WATER STORAGE TANK	18561
B13PGST16D	D-16D WASH WATER STORAGE TANK	18561
B13PGST19	D-19 HEAVIES STORAGE TANK	18561
B13PGST201	D-201 POLYGLYCOL CHECK TANK	18561, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000, 106.476/09/04/2000, 106.478/09/04/2000
B13PGST202	D-1202 POLYGLYCOL CHECK TANK	18561, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000, 106.476/09/04/2000, 106.478/09/04/2000
B13PGST203	D-203 POLYGLYCOL STORAGE TANK	18561, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000, 106.476/09/04/2000, 106.478/09/04/2000
B13PGST204	D-204 POLYGLYCOL STORAGE TANK	18561
B13PGST216	D-1216 POLYGLYCOL STORAGE TANK	18561
B13PGST217	D-1217 POLYGLYCOL STORAGE TANK	18561
B13PGST21	D-21 HEAVIES STORAGE TANK	18561
B13PGST222	D-1222 PROCESS TANK	18561, 106.261/11/01/2003, 106.262/11/01/2003

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B13PGST223	D-1223 PRODUCT STORAGE	18561
B13PGST224	D-1224 PROCESS TANK	18561
B13PGST225	D-1225 PROCESS TANK	18561
B13PGST226	D-1226 PROCESS TANK	18561
B13PGST227	D-1227 PROCESS TANK	18561
B13PGST228	D-1228 POLYGLYCOL STORAGE TANK	18561
B13PGST229	D-1229 POLYGLYCOL STORAGE TANK	18561
B13PGST22	D-22 POLYGLYCOL STORAGE TANK	18561
B13PGST23	D-23 POLYGLYCOL STORAGE TANK	18561
B13PGST240	D-1240 POLYGLYCOL STORAGE TANK	18561
B13PGST241	D-1241 POLYGLYCOL STORAGE TANK	18561
B13PGST242	D-1242 PROCESS TANK	18561, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000, 106.476/09/04/2000, 106.478/09/04/2000
B13PGST243	D-1243 PROCESS TANK	18561
B13PGST244	D-1244 PROCESS TANK	18561
B13PGST245	D-1245 POLYGLYCOL STORAGE TANK	18561
B13PGST246	D-1246 POLYGLYCOL STORAGE TANK	18561
B13PGST253	D-1253 POLYGLYCOL STORAGE TANK	18561
B13PGST254	D-1254 STORAGE TANK	18561
B13PGST256	D-1256 POLYGLYCOL STORAGE TANK	18561
B13PGST260	D-1260 MDEA PROCESS TANK	18561

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B13PGST261	D-1261 MDEA HEAVIES STORAGE TANK	18561
B13PGST262	D-1262 MDEA PROCESS TANK	18561
B13PGST265	D-1265 MDEA PROCESS TANK	18561
B13PGST266	D-1266 POLYGLYCOL STORAGE TANK	18561
B13PGST268	D-1268 ESTER STORAGE TANK	18561
B13PGST269	D-1269 AMINES STORAGE TANK	18561
B13PGST26	D-26 STORAGE TANK	18561
B13PGST27	D-27 STORAGE TANK	18561
B13PGST28	D-28 STORAGE TANK	18561
B13PGST2	D-2 OLOA PROCESS VESSEL	18561
B13PGST306	D-3006 STORAGE TANK	18561
B13PGST308	D-3008 POLYGLYCOL STORAGE TANK	18561
B13PGST309	D-3009 POLYGLYCOL STORAGE TANK	18561
B13PGST3	D-3 WATER TANK	18561
B13PGST40	D-40 POLYGLYCOL STORAGE TANK	18561
B13PGST41	D-41 POLYGLYCOL STORAGE TANK	18561
B13PGST44	D-44 POLYGLYCOL STORAGE TANK	18561
B13PGST45	D-45 POLYGLYCOL STORAGE TANK	18561
B13PGST501	D-1501 POLYGLYCOL STORAGE TANK	18561
B13PGST506	D-506 STORAGE TANK	18561
B13PGST508	D-508 STORAGE TANK	18561

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B13PGST55	D-55 POLYGLYCOL STORAGE TANK	18561
B13PGST56	D-56 POLYGLYCOL STORAGE TANK	18561
B13PGST57	D-57 POLYGLYCOL STORAGE TANK	18561
B13PGST58	D-58 POLYGLYCOL STORAGE TANK	18561
B13PGST607	D-607 AMBITROL PROCESS VESSEL	18561
B13PGST661	D-661 STORAGE TANK VENT	18561
B13PGST662	D-662 PROCESS TANK	18561
B13PGST663	D-663 POLYGLYCOL STORAGE TANK	18561
B13PGST664	D-664 POLYGLYCOL STORAGE TANK	18561
B13PGST668	D-668 STORAGE TANK	18561
B13PGST669	D-669 STORAGE TANK	18561
B13PGST671	D-671 POLYGLYCOL STORAGE TANK	18561
B13PGST67	D-667 AMBITROL COOLANT STORAGE VESSEL	18561
B13PGST701	D-701 HEAVY VOC STORAGE TANK	18561
B13PGST702	D-702 POLYGLYCOL STORAGE TANK	18561
B13PGST703	D-703 POLYGLYCOL STORAGE TANK	18561
B13PGST803	D-803 STORAGE TANK	18561
B13PGST850	D-850 AMBITROL POT	18561
B13PGST870	D-870 EDA STORAGE TANK	18561
B13PGST871	D-871 EDA STORAGE TANK	18561
B13PGST901	D-901 POLYGLYCOL STORAGE TANK	18561

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B13PGSTT7A	T-7A AMBITROL STORAGE FOR MRU	18561
B13PGSV22	T-22 SCRUBBER (MA SCRUBBER)	18561
B13PGSV2	SC-2 SCRUBBER (EDA SCRUBBER)	18561
B13PGSV3	SC-2 KETTLE SCRUBBER	18561
B13PGT11	T-11 AEEA DISTILLATION TOWER	18561
B13PGT12	T-12 AEEA DISTILLATION TOWR	18561
B13PGT13	T-13 AEEA DISTILLATION TOWER	18561
B13PGT20	T-20 MDEA DISTILLATION TOWER	18561
B13PGT21	T-21 MDEA DISTILLATION TOWER	18561
B13PGVJ3	PGA VACUUM JET SYSTEM #3	18561
B13SCPOLY	VENT PIPE HEADER BEFORE B13SV3 SCRUBBER	18561
B17PEFU01	PGE FUGITIVES	75751, 106.262/11/01/2003
B17PEPT351	CRUDE EPH RERUN DRUM D-351	75751
B17PEPT352	CRUDE PPH RERUN DRUM D-352	75751
B17PEST012	PPH STORAGE TANK D-2012	75751, 106.261/11/01/2003, 106.262/11/01/2003
B17PEST015	PPH STORAGE TANK D-2015	75751, 106.261/11/01/2003, 106.262/11/01/2003
B17PEST01A	EPH TANK D-3201A	75751, 106.261/11/01/2003, 106.262/11/01/2003
B17PEST364	DAY DRUM D-364	75751, 106.261/11/01/2003, 106.262/11/01/2003
B17PEST365	DAY DRUM D-365	75751
B17PEST371	TOWER BOTTOMS STORAGE D-371	75751, 106.261/11/01/2003, 106.262/11/01/2003
B17PEST372	TOWER BOTTOMS DRUM D-372	75751, 106.261/11/01/2003, 106.262/11/01/2003

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B17PGFU2	FUGITIVES (B-1700 BLOCK)	18561
B17PGST010	D-2010 POLYGLYCOL STORAGE TANK	18561
B17PGST011	D-2011 POLYGLYCOL STORAGE TANK	18561
B17PGST012	D-2012 POLYGLYCOL STORAGE TANK	18561
B17PGST013	D-2013 POLYGLYCOL STORAGE TANK	18561
B17PGST014	D-2014 POLYGLYCOL STORAGE TANK	18561
B17PGST015	D-2015 POLYGLYCOL STORAGE TANK	18561
B17PGT201A	D-3201A POLYGLYCOL STORAGE TANK	18561
B17PGT201B	D-3201B POLYGLYCOL STORAGE TANK	18561
B17SV384	PROCESS SCRUBBER T-384	75751, 106.261/11/01/2003, 106.262/11/01/2003
B39GMFU1	REACTOR AREA FUGITIVE, GMA EQUIPMENT	104144, 106.261/11/01/2003, 106.262/11/01/2003
B39GMFU2	PROCESS FUGITIVES, EAST TANK FARM, GMA EQUIPMENT	104144
B39GMFU3	PROCESS FUGITIVES, WEST TANK FARM, GMA EQUIPMENT	104144
B39GMLR1	TANK TRUCK LOADING/UNLOADING	104144
B39GMLR2	TRANSFER RACK	104144
B39GMSP215	S-215 VOC SEPARATOR	104144
B39GMSP220	S-220 VOC SEPARATOR	104144
B39GMSP226	S-226 VOC SEPARATOR	104144
B39GMSP228	S-228 VOC SEPARATOR	104144
B39GMST264	D-264 WASTE STORAGE	104144
B39GMST70A	D-270A STORAGE TANK	104144

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B39GMST70B	D-270B STORAGE TANK	104144
B39GMST75A	D-275A GMA STORAGE	104144
B39GMST75B	D-275B GMA STORAGE	104144
B39GMST801	D-801 STORAGE TANK	104144
B39GMST828	D-828 STORAGE TANK	104144
B39GMVH290	T-290 VENT HEADER	104144
B39GMWT257	D-257 WASTE WATER TANK	104144
B39PT290	D-290 EFFLUENT RECEIVER VESSEL FOR T-290	104144
B39RX210	R-210 GMA REACTOR	104144
B39SP245	D-245 VOC WATER SEPARATOR	104144
B39SP265	D-265 GMA/WATER SEPARATOR	104144
B39ST285	D-285 ETHYLENE GLYCOL STORAGE	104144
B43IPD141	D-141 KNOCK OUT POT	18561
B43IPFU1	IPG FUGITIVES	18561, 106.261/11/01/2003, 106.262/11/01/2003
B43IPLR1	LOADING RACK	18561
B43IPR101A	D-101A PROCESS TANK	18561
B43IPR101B	D-101B PROCESS TANK	18561
B43IPRX1	IPG REACTOR (KR-1)	18561
B43IPST03A	D-103A POLYGLYCOL STORAGE TANK	18561
B43IPST03B	D-103B POLYGLYCOL STORAGE TANK	18561
B43IPST104	D-104 POLYGLYCOL STORAGE TANK	18561

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
B43IPST105	D-105 POLYGLYCOL STORAGE TANK	18561
B43IPST106	D-106 POLYGLYCOL STORAGE TANK	18561
B43IPST107	D-107 POLYGLYCOL STORAGE TANK	18561
B43IPST108	D-108 POLYGLYCOL STORAGE TANK	18561
B43IPST109	D-109 POLYGLYCOL STORAGE TANK	18561
B43IPST111	D-111 POLYGLYCOL STORAGE TANK	18561
B43IPST113	D-113 STORAGE TANK VENT	18561
B43IPST114	D-114 POLYGLYCOL STORAGE TANK	18561
B43IPST117	D-117 STORAGE TANK VENT	18561
B43IPST121	D-121 STORAGE TANK (WATER)	18561
B43IPST122	D-122 STORAGE TANK (WATER)	18561
B43IPST123	D-123 STORAGE TANK	18561
B43IPST127	D-127 ACETIC ACID TANK	18561
B43IPST130	D-130 POLYGLYCOL STORAGE TANK	18561
B43IPSV1	S-101 SCRUBBER	18561
B43IPV132	F-132 SOLIDS REMOVAL	18561
B43V132A	D-132A MAGSIL ADDITION POT	18561
PROGMA	PROCESS UNIT FOR GMA	104144
PROIPG	IPG PROCESS UNIT	18561
PROPGA	PGA PROCESS UNIT	18561
PROPGE	PGE PROCESS UNIT	75751

Appendix A

Acronym List 200

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
EIP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Message

From: Larson, Darrin [Larson.Darrin@epa.gov]
Sent: 8/9/2018 1:39:15 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
Subject: Thanks - RE: Data on Huntsman Ethylene Oxide

Darrin Larson
Chief, Air Permitting Enforcement Section (6EN-AA)
U.S. EPA Region 6
Office: 214-665-7115
Mobile: 972-467-5509

From: Wilson, Aimee
Sent: Thursday, August 09, 2018 7:13 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Larson, Darrin <Larson.Darrin@epa.gov>
Subject: FW: Data on Huntsman Ethylene Oxide

From: Jesse Lovegren [mailto:Jesse.Lovegren@tceq.texas.gov]
Sent: Wednesday, August 08, 2018 5:35 PM
To: Wilson, Aimee <Wilson.Aimee@epa.gov>
Cc: Rebecca Partee <rebecca.partee@tceq.texas.gov>
Subject: Data on Huntsman Ethylene Oxide

Aimee,

Here's what I've gotten so far (spreadsheet attached).

First, I got a list of all of the EPNs that had reported EO emissions in our 2017 emissions inventory using our central registry query page:
http://www15.tceq.texas.gov/crpub/
There were 30 EPN's total with routine EO emissions, and 40 more with only non-routine EO emissions.

Then I got a list of all active air permits and PBRs (from the same database) at the site.

I narrowed your list down to 14 case-by-case permits and 142 PBR's. I looked at the MRT's from the permits and copied down all of the EPN's. I cross tabulated them to tie the routine EO-emitting EPN's and was able to get permits for 18 of them (you can probably do a better job with a human eye [I just used a computer]).

Feel free to call tomorrow if I can help further as you research the permits. I may be able to do a batch download of some basic files (e.g., technical review summary for a PBR), so please check in with me tomorrow about ways we can refine your search.

Best,

Jesse Lovegren, Ph.D., P.E.
512-239-1284

Air Permits Division
TCEQ

Message

From: Jegede, Foluke [ajegede@eastman.com]
Sent: 12/13/2017 2:45:15 PM
To: R6AirPermitsTX [R6AirPermitsTX@epa.gov]
CC: Wilson, Aimee [Wilson.Aimee@epa.gov]
Subject: Eastman Chemical, Texas City - O-1400 Title V Renewal Application
Attachments: O-1400 Renewal Searchable 12-6-2017.pdf

Good morning,

As requested by EPA Region 6 office, Eastman Chemical, Texas City Inc. is submitting a copy of its FOP O-1400 renewal application. The attached document has been converted to a searchable Adobe Acrobat (pdf) file.

If you have questions, please don't hesitate to contact me.

Thanks,

Foluke Jegede
Environmental Engineer
Eastman Chemical Company
Texas City Operations
201 Bay St.
PO Box 1311
Texas City, TX 77592
(409) 942-3510
ajegede@eastman.com

EASTMAN

The results of insight

Eastman Chemical Texas City, Inc.
P.O. Box 1311
Texas City, Texas 77592-1311

EASTMAN

December 6, 2017

CERTIFIED MAIL
7008 1300 0001 1592 0717

Air Permits Initial Review Team, MC-161
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Subject: Permit Renewal Application, SOP O-1400
Eastman Chemical Texas City, Inc. – Acct. No. GB-0060-B
CN600126288, RN100212620

Eastman Chemical Texas City, Inc. (Eastman) is submitting the enclosed application for renewal of TCEQ SOP O-1400. The following documents are attached:

- Form OP-CRO1
- Form OP-1
- Form OP-2 with attachments detailing provisional terms and conditions,
- Form OP-SUMR,
- Form OP-ACPS,
- Unit Attribute Forms OP-UA2, OP-UA3, OP-UA15, OP-UA17,
- Form OP-REQ1, and
- Form OP-REQ3

We appreciate your review of this application. If you or your staff have any questions, please contact me at (409) 942-3510 or Jeff Barnwell at (409) 942-3461.

Sincerely,

Foluke Jegede
Environmental Representative – Eastman Chemical Texas City, Inc.

Attachments

cc: TCEQ - Air Section Manager, Region 12
5425 Polk St., Suite H, Houston, TX 77023-1423

EPA Region 6 - Air Permits Section, Operating Permits (Title V) [Electronic on CD]
1445 Ross Avenue, Suite 1200, Dallas, TX 75202

Galveston County Health District - Air & Water Pollution Services
P.O. Box 939, La Marque, Texas 77568

Form OP-CRO1
Certification by Responsible Official
Federal Operating Permit Program

All initial permit application, revision, renewal, and reopening submittals requiring certification must be addressed using this form. Updates to site operating permit (SOP) and temporary operating permit (TOP) applications, other than public notice verification materials, must be certified prior to authorization of public notice or start of public announcement. Updates to general operating permit (GOP) applications must be certified prior to receiving an authorization to operate under a GOP.

I. Identifying Information		
RN: 100212620	CN: 600126288	Account No.: GB-0060-B
Permit No.: O-1400	Project No.:	
Area Name: Methanol and Acetic Acid Units	Company Name: Eastman Chemical Texas City, Inc.	

II. Certification Type *(Please mark the appropriate box)*

☒ Responsible Official ☐ Duly Authorized Representative

III. Submittal Type *(Please mark the appropriate box) (Only one response can be accepted per form)*

☐ SOP/TOP Initial Permit Application ☐ Update to Permit Application

☐ GOP Initial Permit Application ☒ Permit Revision, Renewal, or Reopening

☐ Other: _____

IV. Certification of Truth

This certification does not extend to information which is designated by the TCEQ as information for reference only.

I, **Sergio Matute** _____ certify that I am the **RO** _____
(Certifier Name printed or typed) *(RO or DAR)*

and that, based on information and belief formed after reasonable inquiry, the statements and information dated during the time period or on the specific date(s) below, are true, accurate, and complete:

Note: Enter Either a Time Period OR Specific Date(s) for each certification. This section must be completed. The certification is not valid without documentation date(s).

Time Period: From _____ to _____
Start Date *End Date*

Specific Dates: **12/06/2017** _____ _____ _____ _____ _____
Date 1 *Date 2* *Date 3* *Date 4* *Date 5* *Date 6*

Signature: _____ Signature Date: 12/06/2017

Title: **Site Manager – Texas City Operations**

Texas Commission on Environmental Quality
Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 1)

Please print or type all information. Direct any questions regarding this application form to the Air Permits Division at (512) 239-1250. Address written inquiries to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division (MC 163), P.O. Box 13087, Austin, Texas 78711-3087.

I.	**Company Identifying Information**							
A.	Company Name: Eastman Chemical Texas City, Inc.							
B.	Customer Reference Number (CN): CN600126288							
C.	Submittal Date *(mm/dd/yyyy)*: 12/06/2017							
II.	**Site Information**							
A.	Site Name: Texas City Operations (TCO)							
B.	Regulated Entity Reference Number (RN): RN100212620							
C.	Primary Account Number for Site: GB-0060-B							
D.	Indicate affected state(s) required to review permit application: *(Check the appropriate box[es].)*							
AR ☐ CO ☐ KS ☐ LA ☐ NM ☐ OK ☐ N/A ☒								
E.	Indicate all pollutants for which the site is a major source based on the site's potential to emit:							
Pollutant	**VOC**	**NO_X**	**SO_2**	**PM_{10}**	**CO**	**Pb**	**HAPS**	**Other** ☐
Major at the Site *(YES/NO)*:	No	Yes	No	No	Yes	No	No	
F.	Is the source a non-major source subject to the Federal Operating Permit Program?							☐ YES ☒ NO
G.	Is the site within a local program area jurisdiction?							☒ YES ☐ NO
H.	Will emissions averaging be used to comply with any Subpart of 40 CFR Part 63?							☐ YES ☒ NO
I.	Indicate the 40 CFR Part 63 Subpart(s) that will use emissions averaging:							
III.	**Permit Type**							
A.	Type of Permit Requested: *(Select only one response)*							
Site Operating Permit (SOP) ☒ Temporary Operating Permit (TOP) ☐ General Operating Permit (GOP) ☐								
IV.	**Initial Application Information** *(Complete for Initial Issuance Applications only.)*							
A.	Is this submittal an abbreviated or a full application?							☐ Abbreviated ☐ Full
B.	If this is a full application, is the submittal a follow-up to an abbreviated application?							☐ YES ☐ NO
C.	If this is an abbreviated application, is this an early submittal for a combined SOP and Acid Rain permit?							☐ YES ☐ NO
D.	Has a copy of this application been submitted (or is being submitted) to EPA? (Refer to the form instructions for additional information.)							☐ YES ☐ NO

Texas Commission on Environmental Quality
Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 2)

V. Confidential Information		
A. Is confidential information submitted in conjunction with this application?		☐ YES ☒ NO
VI. Responsible Official (RO)		
A. RO Name: (☒ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.) Sergio Matute		
B. RO Title: Site Manager		
C. Employer Name: Eastman Chemical Texas City, Inc.		
D. Mailing Address: P.O. Box 1311		
City: Texas City	State: Texas	ZIP Code: 77592
Territory:	Country: United States	Foreign Postal Code:
E. Internal Mail Code:		
F. Telephone No.: 409-942-3015		
G. Fax No.: 409-942-3448		
H. E-mail: sergio@eastman.com		
VII. Technical Contact Identifying Information *(Complete if different from RO.)*		
A. Technical Contact Name: (☐ Mr. ☐ Mrs. ☒ Ms. ☐ Dr.) Foluke Jegede		
B. Technical Contact Title: Environmental Representative		
C. Employer Name: Eastman Chemical Texas City, Inc.		
D. Mailing Address:P.O. Box 1311		
City: Texas City	State: Texas	ZIP Code: 77592
Territory:	Country: United States	Foreign Postal Code:
E. Internal Mail Code:		
F. Telephone No.: 409-942-3510		
G. Fax No.: 409-942-3448		
H. E-mail: ajegede@eastman.com		
VIII. Reference Only Requirements *(For reference only.)*		
A. State Senator: Larry Taylor		
B. State Representative: Wayne Faircloth		
C. Has the applicant paid emissions fees for the most recent agency fiscal year (Sept. 1 - August 31)?		☒ YES ☐ NO ☐ N/A
D. Is the site subject to bilingual notice requirements pursuant to 30 TAC § 122.322?		☒ YES ☐ NO

Texas Commission on Environmental Quality
Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 3)

VIII.	**Reference Only Requirements** *(For reference only.)* ***(continued)***		
E.	Indicate the alternate language(s) in which public notice is required: Spanish		
F.	RO is opting out of electronic correspondence from TCEQ (*otherwise leave blank*):		☐ Opt-Out of E-mailed Docs
IX.	**Off-Site Permit Request** *(Optional for applicants requesting to hold the FOP and records at an off-site location.)*		
A.	Office/Facility Name:		
B.	Physical Address:		
City:		State:	ZIP Code:
Territory:		Country:	Foreign Postal Code:
C.	Physical Location:		
D.	Contact Name: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)		
E.	Telephone No.:		
X.	**Application Area Information**		
A.	Area Name: Methanol and Acetic Acid Units		
B.	Physical Address: 201 Bay St. South		
City: Texas City		State: Texas	ZIP Code: 77592
C.	Physical Location:		
D.	Nearest City:		
E.	State:		
F.	ZIP Code:		
G.	Latitude (nearest second): 29 O 22 ‘ 48 “		
H.	Longitude (nearest second): 94 O 53 ‘ 36 “		
I.	Principal Company Products or Business:		
Principal Standard Industrial Classification Code (SIC): 2869			
Principal North American Industry Classification System (NAICS): 325199			
J.	Are there any emission units that were not in compliance with the applicable requirements identified in the application at the time of application submittal?		☐ YES ☒ NO
K.	Indicate the estimated number of emission units in the application area: 30		
L.	Are there any emission units in the application area subject to the Acid Rain Program?		☐ YES ☒ NO

Texas Commission on Environmental Quality
Federal Operating Permit Program
Site Information Summary
Form OP-1 (Page 4)

XI. Public Notice *(Complete this section for SOP Applications and Acid Rain Permit Applications only.)*		
A. Name of public place to view application and draft permit: Moore Public Library		
B. Physical Address: 1701 9th Ave.		
City: Texas City	ZIP Code: 77590	
C. Contact Person (Someone who will answer questions from the public, during the public notice period):		
(☐ Mr. ☐ Mrs. ☒ Ms. ☐ Dr.): Foluke Jegede		
D. Contact Mailing Address: P.O. Box 1311		
City: Texas City	State: Texas	ZIP Code: 577592
Territory:	Country: United States	Foreign Postal Code:
E. Internal Mail Code:		
F. Telephone No.:		
XII. Delinquent Fees and Penalties		
Notice: This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of Attorney General on behalf of the TCEQ are paid in accordance with the "Delinquent Fee and Penalty Protocol."		
Complete Sections XIII and XIV for Acid Rain Permit and CSAPR applications only. Please include a copy of the Certificate of Representation submitted to EPA.		
XIII. Designated Representative (DR) Identifying Information		
A. DR Name: (☐ Mr. ☐ Mrs. ☐ Ms. ☐ Dr.)		
B. DR Title:		
C. Employer Name:		
D. Mailing Address:		
City:	State:	ZIP Code:
Territory:	Country:	Foreign Postal Code:
E. Internal Mail Code:		
F. Telephone No.:		
G. Fax No.:		
H. E-mail:		

EPA-R6-2021-005139

Texas Commission on Environmental Quality
Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2
Table 1

Date: 12/06/2017	**Permit No.:** O-1400	**Account No.:** GB-0060-B	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units	**Company Name:** Eastman Chemical Texas City, Inc.	**Customer Reference No.:** CN600126288	

For Submissions to EPA *(SOP renewal, minor revision, and significant revision applications only)*

Has a copy of this application been submitted (or is being submitted) to EPA? *(Refer to the form instructions for additional information.)* ☒ YES ☐ NO

I. Application Type

Indicate the type of application:

☒ Renewal ☐ Streamlined Revision *Must include provisional terms and conditions as explained in the instructions.*)

☐Significant Revision ☐ Revision Requesting Prior Approval ☐ Administrative Revision ☐ Response to Reopening

II. Qualification Statement

For SOP Revisions Only	The referenced changes qualify for the marked revision type.	☐ YES ☐ NO
For GOP Revisions Only	The permitted area continues to qualify for a GOP.	☐ YES ☐ NO

III. Major Source Pollutants *(Complete this section if the permit revision is due to a change at the site or change in regulations.)*

Indicate all pollutants for which the site is a major source based on the site's potential to emit after the change is operated:

Pollutant	**VOC**	**NO_x**	**SO_2**	**PM_{10}**	**CO**	**Pb**	**HAPs**	**Other** ☐
Major at the Site *(YES/NO)*:								

IV. Reference Only Requirements *(For reference only.)*

Has the applicant paid emissions fees for the most recent agency fiscal year (September 1 - August 31)?	☒ YES ☐ NO ☐ N/A
RO is opting out of electronic correspondence from TCEQ (*otherwise leave blank*):	☐ Opt-Out of E-mailed Docs

V. Delinquent Fees and Penalties

Notice: This form will not be processed until all delinquent fees and/or penalties owed the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and penalty protocol.

6.7.2022 Prod

ED_005994_00002134-00007

EPA-R6-2021-005139

Texas Commission on Environmental Quality
Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2
Table 2

Date: 12/06/2017	**Permit No.:** O-1400	**Account No.:** GB-0060-B	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units	**Company Name:** Eastman Chemical Texas City, Inc.		**Customer Reference No.:** CN600126288

I. Description of Revision

Revision No.	Revision Code	Unit/Group Process			NSR Authorization	Description of Changes and Provisional Terms and Conditions
		New Unit	ID No.	Applicable Form		
1	MS-C	Yes	50T508-4	OP-UA3	106.472/9/4/2000	Adding a new fixed-roof storage tank to the permit. Please refer to OP-2 Table 2 Attachment for provisional terms and conditions.
2	MS-C	Yes	50D209	OP-UA15 OP-UA17	106.261/11/1/2003	Adding a new vacuum distillation column and recovery system to the permit. Please refer to OP-2 Table 2 attachments for provisional terms and conditions.
3	MS-C	Yes	50EG-501	OP-UA2	106.511-09/04/2000	Adding a new emergency engine to the permit. Please refer to OP-2 Table 2 Attachment for provisional terms and conditions.
4	MS-C	No	44EG-701	OP-SUMR	SE 005/05/05/1976	Deleting an existing emergency engine from the permit. This unit has been permanently shut down.

6.7.2022 Prod

ED_005994_00002134-00008

EPA-R6-2021-005139

Texas Commission on Environmental Quality
Federal Operating Permit Program
Application for Permit Revision/Renewal
Form OP-2 (Table 3)

Date: 12/06/2017	**Permit No.:** O-1400	**Account No.:** GB-0060-B	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units	**Company Name:** Eastman Chemical Texas City, Inc.	**Customer Reference No.:** CN600126288	

I. Significant Revision *(Complete this section if you are submitting a significant revision application or a **renewal application** that includes a significant revision.)*

A.	Is the site subject to bilingual requirements pursuant to 30 TAC § 122.322?	☒ YES ☐ NO
B.	Indicate the alternate language(s) in which public notice is required: Spanish	
C.	Will there be a change in air pollutant emissions as a result of the significant revision?	☐ YES ☒ NO
D.	Indicate the air pollutant(s) that will be changing and include a brief description of the change in pollutant emissions for each pollutant:	

Pollutant	Description of the Change in Pollutant Emissions

6.7.2022 Prod

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EPA-R6-2021-005139

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Monitoring And Testing Requirements	Recordkeeping Requirements	Reporting Requirements
50T508-4	EU	R5111-1	VOC	30 TAC Chapter 115, Subchapter B, Division 1, Storage of VOCs	§115.111(a)(1)	[G]§115.117	§115.118(a)(1) §115.118(a)(5) §115.118(a)(6)(A) §115.118(a)(7)	None
50T508-4	EU	60Kb	VOC	40 CFR Part 60, Subpart Kb	§60.110b(a)	§60.116b(a) §60.116b(b) §60.116b(c) §60.116b(d) §60.116b(e) §60.116b(e)(1) [G]§60.116b(e)(3)	§60.116b(a) §60.116b(b) §60.116b(c)	§60.116b(d)
50D209	EU	R5121-1	VOC	30 TAC Chapter 115, Subchapter B, Division 2, Vent Gas Control	§115.127(a)(4) §115.127(a)(4)(D)	None	None	None
50D209	EU	60NNN	VOC	40 CFR Part 60, Subpart NNN	§60.660(c)(4) §60.662(c)	[G]§60.664(e) §60.664(f) §60.664(g) §60.664(g)(1) §60.664(g)(2)	[G]§60.665(h) §60.665(p)	§60.664(g)(1) §60.665(l) §60.665(l)(7) §60.665(p)

6.7.2022 Prod

ED_005994_00002134-00010

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Monitoring And Testing Requirements	Recordkeeping Requirements	Reporting Requirements
50EG-501	EU	R7300	EXEMPT	30 TAC Chapter 117, Subchapter B	[G]§117.303(a)(11) [G]§117.310(f)	None	§117.340(j) [G]§117.345(f)(6) [G]§117.345(f)(10)	None
50EG-501	EU	60IIII	NMHC + NOx	40 CFR Part 60 Subpart IIII	NMHC+NOx Limit 4.0 g/kW-hr §60.4205(b) §60.4206 §60.4207(b) [G]§60.4211(a) §60.4211(c) [G]§60.4211(f) §60.4218 §89.112(a)	§60.4209(a)	§60.4214(b)	None
50EG-501	EU	60IIII	CO	40 CFR Part 60 Subpart IIII	CO Limit 3.5 g/kW-hr §60.4205(b) §60.4206 §60.4207(b) [G]§60.4211(a) §60.4211(c) [G]§60.4211(f) §60.4218 §89.112(a)	§60.4209(a)	§60.4214(b)	None

EPA-R6-2021-005139
6.7.2022 Prod
ED_005994_00002134-00011

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Monitoring And Testing Requirements	Recordkeeping Requirements	Reporting Requirements
50EG-501	EU	60IIII	PM	40 CFR Part 60 Subpart IIII	PM Limit 0.02 g/kW-hr §60.4205(b) §60.4206 §60.4207(b) [G]§60.4211(a) §60.4211(c) [G]§60.4211(f) §60.4218 §89.112(a)	§60.4209(a)	§60.4214(b)	None

EPA-R6-2021-005139
6.7.2022 Prod
ED_005994_00002134-00012

EPA-R6-2021-005139

Texas Commission on Environmental Quality
Federal Operating Permit Program
Individual Unit Summary for Revisions
Form OP-SUMR
Table 1

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Unit/Process						Preconstruction Authorizations	
AI	**Revision No.**	**ID No.**	**Applicable Form**	**Name/ Description**	**CAM**	**30 TAC Chapter 116/ 30 TAC Chapter 106**	**Title I**
A	1	50T508-4	OP-UA3	Acetic Acid Storage Tank		106.472/9/4/2000	
A	2	50D209	OP-UA15 OP-UA17	Mixed Acid Purification Column		106.261/11/1/2003	
A	3	50EG-501	OP-UA2	Emergency Generator		106.511-09/04/2000	
D	4	44EG-701	OP-2	Emergency Generator		SE 005/05/05/1976	

6.7.2022 Prod

ED_005994_00002134-00013

Texas Commission on Environmental Quality
Form OP-ACPS
Application Compliance Plan and Schedule

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

- Part 1 of this form must be submitted with all initial FOP applications and renewal applications.
- The Responsible Official must use Form OP-CRO1 (Certification by Responsible Official) to certify information contained in this form in accordance with 30 TAC § 122.132(d)(8).

Part 1

A.	**Compliance Plan — Future Activity Committal Statement**	
The *Responsible Official* commits, utilizing reasonable effort, to the following: As the responsible official it is my intent that all emission units shall continue to be in compliance with all applicable requirements they are currently in compliance with, and all emission units shall be in compliance by the compliance dates with any applicable requirements that become effective during the permit term.		
B.	**Compliance Certification - Statement for Units in Compliance*** **(Indicate response by entering an "X" in the appropriate column)**	
1.	With the exception of those emission units listed in the Compliance Schedule section of this form (Part 2, below), and based, at minimum, on the compliance method specified in the associated applicable requirements, are all emission units addressed in this application in compliance with all their respective applicable requirements as identified in this application?	☒ YES ☐ NO
2.	Are there any non-compliance situations addressed in the Compliance Schedule Section of this form (Part 2)?	☐ YES ☒ NO
3.	If the response to Item B.2, above, is "Yes," indicate the total number of Part 2 attachments included in this submittal. *(For reference only)*	
*	*For Site Operating Permits (SOPs), the complete application should be consulted for applicable requirements and their corresponding emission units when assessing compliance status.* *For General Operating Permits (GOPs), the application documentation, particularly Form OP-REQ1 should be consulted as well as the requirements contained in the appropriate General Permits portion of 30 TAC Chapter 122.* *Compliance should be assessed based, at a minimum, on the required monitoring, testing, record keeping, and/or reporting requirements, as appropriate, associated with the applicable requirement in question.*	

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Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 1)
Federal Operating Permit Program
Table 1a: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117)
Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** RN600126288

Unit ID No.	SOP/GOP Index No.	Horsepower Rating	RACT Date Placed in Service	Functionally Identical Replacement	Type of Service	Fuel Fired	Engine Type	ESAD Date Placed in Service	Diesel HP Rating
50EG-501	R7300				D2001+				

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Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 4)
Federal Operating Permit Program
Table 2a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Unit ID No.	SOP/GOP Index No.	HAP Source	Brake HP	Construction/ Reconstruction Date	Nonindustrial Emergency Engine	Service Type	Stationary RICE Type
50EG-501	63ZZZZ	AREA-M	100-250	06+		EMER-A	

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Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 10)
Federal Operating Permit Program
Table 5a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Unit ID No.	SOP/GOP Index No.	Applicability Date	Exemptions	Service	Commencing	Manufacture Date
50EG-501	60IIII	2005+	NONE	EMERG	CON	0406+

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Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 11)
Federal Operating Permit Program
Table 5b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Unit ID No.	SOP/GOP Index No.	Diesel	AES No.	Displacement	Generator Set	Model Year	Install Date
50EG-501	60IIII	DIESEL		10-CS		2013	

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Stationary Reciprocating Internal Combustion Engine Attributes
Form OP-UA2 (Page 12)
Federal Operating Permit Program
Table 5c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Unit ID No.	SOP/GOP Index No.	Kilowatts	Filter	Standards	Compliance Option	PM Compliance	Options
50EG-501	60IIII	E130-368			MANU YES		

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Storage Tank/Vessel Attributes
Form OP-UA3 (Page 3)
Federal Operating Permit Program
Table 3: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels
(Including Petroleum Liquid Storage Vessels)

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Units	**Customer Reference No.:** 600126288	

Unit ID No.	SOP/GOP Index No.	Product Stored	Storage Capacity	Maximum TVP	Storage Vessel Description	AMEL ID No.	Reid Vapor Pressure	Control Device ID No.
50T508-4	60KB-1	VOL	40K+	0.5-0.75	NONE3			

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Storage Tank/Vessel Attributes
Form OP-UA3 (Page 4)
Federal Operating Permit Program
Table 4a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Storage of Volatile Organic Compounds (VOCs)

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Units	**Customer Reference No.:** CN600126288	

Unit ID No.	SOP/GOP Index No.	Alternate Control Requirement	ACR ID No.	Product Stored	Storage Capacity	Throughput	Potential to Emit	Uncontrolled Emissions
50T508-4	R5111-1	NO		VOC1	A40K+			

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Storage Tank/Vessel Attributes
Form OP-UA3 (Page 5)
Federal Operating Permit Program
Table 4b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Storage of Volatile Organic Compounds (VOCs)

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Units	**Customer Reference No.:** CN600126288	

Unit ID No.	SOP/GOP Index No.	Construction Date	Tank Description	True Vapor Pressure	Primary Seal	Secondary Seal	Control Device Type	Control Device ID No.
50T508-4	R5111-1		VRS1	1-				

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Storage Tank/Vessel Attributes
Form OP-UA3 (Page 13)
Federal Operating Permit Program
Table 9a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subpart G: National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Storage Vessels

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Units	**Customer Reference No.:** CN600126288	

Unit ID No.	SOP Index No.	MACT Subpart F/G Applicability	NESHAP Subpart Y Applicability	NSPS Subpart Kb Applicability	Maximum TVP	Emission Control Type	AMOC ID No.
50T508-4	63G-1	NO	NO	YES			

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Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 3)
Federal Operating Permit Program
Table 2a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Emission Point ID No.	SOP/GOP Index No.	Chapter 115 Division	Combustion Exhaust	Vent Type	Total Uncontrolled VOC Weight	Combined 24-Hour VOC Weight	VOC Concentration	VOC Concentration or Emission Rate at Maximum Operating Conditions
50D209	R5121-1	NO	NO	DISTOPER				

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Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 4)
Federal Operating Permit Program
Table 2b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Acetic Acid and Methanol Units		**Customer Reference No.:** CN600126288

Emission Point ID No.	SOP Index No.	Alternate Control Requirement	ACR ID No.	Control Device Type	Control Device ID No.
50D209	R5121-1	NONE			

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Emission Point/Stationary Vent/Distillation Operation Vent/Process Vent Attributes
Form OP-UA15 (Page 5)
Federal Operating Permit Program
Table 2c: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter B: Vent Gas Control

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Acetic Acid and Methanol Units		**Customer Reference No.:** CN600126288

Emission Point ID No.	SOP Index No.	Total Design Capacity	Flow Rate/Concentration	40 CFR Part 60, Subpart NNN Requirements	40 CFR Part 60, Subpart RRR Requirements
50D209	R5121-1	1100+	500+	YES	NO

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Texas Commission on Environmental Quality
Distillation Unit Attributes
Form OP-UA17 (Page 1)
Federal Operating Permit Program

Table 1a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart NNN: Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Unit ID No.	SOP Index No.	Subpart NNN Chemicals	Construction/Modification Date	Vent Type	Distillation Unit Type	Total Design Capacity	Vent Stream Flow Rate
50D209	60NNN-1	YES	83+	VRS	NONE	1+	8+

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Texas Commission on Environmental Quality
Distillation Unit Attributes
Form OP-UA17 (Page 2)
Federal Operating Permit Program

Table 1b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60)
Subpart NNN: Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

Date: 12/06/2017	**Permit No.:** O-1400	**Regulated Entity No.:** RN100212620
Area Name: Methanol and Acetic Acid Units		**Customer Reference No.:** CN600126288

Unit ID No.	SOP Index No.	Total Resource Effectiveness	TOC Reduction	Subpart NNN Control Device	ACT ID No.	Subpart NNN Control Device ID No.	Emission Point ID No(s).		Organic Monitoring Device
50D209	60NNN-1	8+B		COND		50E232	50K201		

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Texas Commission on Environmental Quality
Application Area-Wide Applicability Determinations and General Information
Form OP-REQ1 (Page 1)
Federal Operating Permit Program

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter**		
	A. Visible Emissions		
♦	1.	The application area includes stationary vents constructed on or before January 31, 1972.	☐ YES ☒ NO
♦	2.	The application area includes stationary vents constructed after January 31, 1972. *If the responses to Questions I.A.1 and I.A.2 are both "NO," go to Question I.A.6.* *If the response to Question I.A.1 is "NO" and the response to Question I.A.2 is "YES," go to Question I.A.4.*	☒ YES ☐ NO
♦	3.	The application area is opting to comply with the requirements for stationary vents constructed after January 31, 1972 for vents in the application area constructed on or before January 31, 1972.	☐ YES ☐ NO
♦	4.	All stationary vents are addressed on a unit specific basis. *If the response to Question I.A.4 is "YES," go to Question I.A.5.*	☐ YES ☒ NO
♦	5.	Test Method 9 (40 CFR Part 60, Appendix A, Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources) is used to determine opacity of emissions in the application area.	☒ YES ☐ NO
♦	6.	The application area includes structures subject to 30 TAC § 111.111(a)(7)(A).	☐ YES ☒ NO
♦	7.	The application area includes sources, other than those specified in 30 TAC § 111.111(a)(1), (4), or (7), subject to 30 TAC § 111.111(a)(8)(A).	☒ YES ☐ NO
♦	8.	Emissions from units in the application area include contributions from uncombined water.	☒ YES ☐ NO
♦	9.	The application area is located in the City of El Paso, including Fort Bliss Military Reservation, and includes solid fuel heating devices subject to 30 TAC § 111.111(c).	☐ YES ☐ NO ☒ N/A

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter (continued)**		
	B. Materials Handling, Construction, Roads, Streets, Alleys, and Parking Lots		
	1.	Items a - d determines applicability of any of these requirements based on geographical location.	
♦	a.	The application area is located within the City of El Paso.	☐ YES ☒ NO
♦	b.	The application area is located within the Fort Bliss Military Reservation, except areas specified in 30 TAC § 111.141.	☐ YES ☒ NO
♦	c.	The application area is located in the portion of Harris County inside the loop formed by Beltway 8.	☐ YES ☒ NO
♦	d.	The application area is located in the area of Nueces County outlined in Group II state implementation plan (SIP) for inhalable particulate matter adopted by the TCEQ on May 13, 1988.	☐ YES ☒ NO
	If there is any "YES" response to Questions I.B.1.a - d, answers Questions I.B.2.a - d. If all responses to Questions I.B.1.a-d are "NO," go to Section I.C.		
	2.	Items a - d determine the specific applicability of these requirements.	
♦	a.	The application area is subject to 30 TAC § 111.143.	☐ YES ☐ NO
♦	b.	The application area is subject to 30 TAC § 111.145.	☐ YES ☐ NO
♦	c.	The application area is subject to 30 TAC § 111.147.	☐ YES ☐ NO
♦	d.	The application area is subject to 30 TAC § 111.149.	☐ YES ☐ NO
	C. Emissions Limits on Nonagricultural Processes		
♦	1.	The application area includes nonagricultural processes subject to 30 TAC § 111.151.	☒ YES ☐ NO
	2.	The application area includes vents from a nonagricultural process that are subject additional monitoring requirements. *If the response to Question I.C.2 is "NO," go to Question I.C.4.*	☐ YES ☒ NO
	3.	All vents from nonagricultural processes in the application area are subject to additional monitoring requirements.	☐ YES ☐ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter (continued)**		
	C.	**Emissions Limits on Nonagricultural Processes (continued)**	
	4.	The application area includes oil or gas fuel-fired steam generators subject to 30 TAC §§ 111.153(a) and 111.153(c).	☐ YES ☒ NO
	5.	The application area includes oil or gas fuel-fired steam generators that are subject to additional monitoring requirements. *If the response to Question I.C.5 is "NO," go to Question I.C.7.*	☐ YES ☒ NO
	6.	All oil or gas fuel-fired steam generators in the application area are subject to additional monitoring requirements.	☐ YES ☐ NO
	7.	The application area includes solid fossil fuel-fired steam generators subject to 30 TAC §§ 111.153(a) and 111.153(b).	☐ YES ☒ NO
	8.	The application area includes solid fossil fuel-fired steam generators that are subject to additional monitoring requirements. *If the response to Question I.C.8 is "NO," go to Section I.D.*	☐ YES ☒ NO
	9.	All solid fossil fuel-fired steam generators in the application area are subject to additional monitoring requirements.	☐ YES ☐ NO
	D.	**Emissions Limits on Agricultural Processes**	
	1.	The application area includes agricultural processes subject to 30 TAC § 111.171.	☐ YES ☒ NO
	E.	**Outdoor Burning**	
♦	1.	Outdoor burning is conducted in the application area. *If the response to Question I.E.1 is "NO," go to Section II.*	☐ YES ☒ NO
♦	2.	Fire training is conducted in the application area and subject to the exception provided in 30 TAC § 111.205.	☐ YES ☐ NO
♦	3.	Fires for recreation, ceremony, cooking, and warmth are used in the application area and subject to the exception provided in 30 TAC § 111.207.	☐ YES ☐ NO
♦	4.	Disposal fires are used in the application area and subject to the exception provided in 30 TAC § 111.209.	☐ YES ☐ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

I.	**Title 30 TAC Chapter 111 - Control of Air Pollution from Visible Emissions and Particulate Matter (continued)**		
	E.	**Outdoor Burning (continued)**	
♦	5.	Prescribed burning is used in the application area and subject to the exception provided in 30 TAC § 111.211.	☐ YES ☐ NO
♦	6.	Hydrocarbon burning is used in the application area and subject to the exception provided in 30 TAC § 111.213.	☐ YES ☐ NO
♦	7.	The application area has received the TCEQ Executive Director approval of otherwise prohibited outdoor burning according to 30 TAC § 111.215.	☐ YES ☐ NO
II.	**Title 30 TAC Chapter 112 - Control of Air Pollution from Sulfur Compounds**		
	A.	**Temporary Fuel Shortage Plan Requirements**	
	1.	The application area includes units that are potentially subject to the temporary fuel shortage plan requirements of 30 TAC §§ 112.15 - 112.18.	☐ YES ☒ NO
III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds**		
	A.	**Applicability**	
♦	1.	The application area is located in the Houston/Galveston/Brazoria area, Beaumont/Port Arthur area, Dallas/Fort Worth area, El Paso area, or a covered attainment county as defined by 30 TAC § 115.10. *See instructions for inclusive counties. If the response to Question III.A.1 is "NO," go to Section IV.*	☒ YES ☐ NO
	B.	**Storage of Volatile Organic Compounds**	
♦	1.	The application area includes storage tanks, reservoirs, or other containers capable of maintaining working pressure sufficient at all times to prevent any VOC vapor or gas loss to the atmosphere.	☐ YES ☒ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

III. Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)		
C. Industrial Wastewater		
1.	The application area includes affected VOC wastewater streams of an affected source category, as defined in 30 TAC § 115.140. *If the response to Question III.C.1 is "NO" or "N/A," go to Section III.D.*	☐ YES ☒ NO ☐ N/A
2.	The application area is located at a petroleum refinery in the Beaumont/Port Arthur or Houston/Galveston/Brazoria area. *If the response to Question III.C.2 is "YES" and the refinery is in the Beaumont/Port Arthur area, go to Section III.D.*	☐ YES ☐ NO
3.	The application area is complying with the provisions of 40 CFR Part 63, Subpart G, as an alternative to complying with this division (relating to Industrial Wastewater). *If the response to Question III.C.3 is "YES," go to Section III.D.*	☐ YES ☐ NO
4.	The application area is located at a plant with an annual VOC loading in wastewater, as determined in accordance with 30 TAC § 115.148, less than or equal to 10 Mg (11.03 tons). *If the response to Question III.C.4 is "YES," go to Section III.D.*	☐ YES ☐ NO
5.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that are subject to the control requirements of 30 TAC § 115.142(1).	☐ YES ☐ NO
6.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that handle streams chosen for exemption under 30 TAC § 115.147(2).	☐ YES ☐ NO
7.	The application area includes wastewater drains, junction boxes, lift stations, or weirs that have an executive director approved exemption under 30 TAC § 115.147(4).	☐ YES ☐ NO
D. Loading and Unloading of VOCs		
♦ 1.	The application area includes VOC loading operations.	☐ YES ☒ NO
♦ 2.	The application area includes VOC transport vessel unloading operations. *For GOP applications, if the responses to Questions III.D.1 - D.2 are "NO," go to Section III.E.*	☐ YES ☒ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	D.	**Loading and Unloading of VOCs (continued)**	
♦	3.	Transfer operations at motor vehicle fuel dispensing facilities are the only VOC transfer operations conducted in the application area.	☐ YES ☐ NO
	E.	**Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities**	
♦	1.	The application area includes one or more motor vehicle fuel dispensing facilities and gasoline is transferred from a tank-truck tank into a stationary storage container. *If the response to Question III.E.1 is "NO," go to Section III.F.*	☐ YES ☒ NO
♦	2.	Transfers to stationary storage containers used exclusively for the fueling of agricultural implements are the only transfer operations conducted at facilities in the application area.	☐ YES ☐ NO
♦	3.	All transfers at facilities in the application area are made into stationary storage containers with internal floating roofs, external floating roofs, or their equivalent. *If the response to Question III.E.2 and/or E.3 is "YES," go to Section III.F.*	☐ YES ☐ NO
♦	4.	The application area is located in a covered attainment county as defined in 30 TAC § 115.10. *If the response to Question III.E.4 is "NO," go to Question III.E.9.*	☐ YES ☐ NO
♦	5.	Stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons are located at the facility.	☐ YES ☐ NO
♦	6.	Stationary gasoline storage containers with a nominal capacity greater than 1,000 gallons are located at the facility.	☐ YES ☐ NO
♦	7.	At facilities located in covered attainment counties other than Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, or Wilson County, transfers are made to stationary storage tanks greater than 1000 gallons located at a facility which has dispensed less than 100,000 gallons of gasoline in a calendar month after October 31, 2014. *If the response to Question III.E.7 is "YES," go to Section III.F.*	☐ YES ☐ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	E.	**Filling of Gasoline Storage Vessels (Stage I) for Motor Vehicle Fuel Dispensing Facilities (continued)**	
♦	8.	At facilities located in Bastrop, Bexar, Caldwell, Comal, Guadalupe, Hays, Travis, Williamson, or Wilson County, transfers are made to stationary storage tanks greater than 1000 gallons located at a facility which has dispensed no more than 25,000 gallons of gasoline in a calendar month after December 31, 2004. *If the response to Question III.E.8 is "YES," go to Section III.F.*	☐ YES ☐ NO
♦	9.	Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991 and for which construction began prior to November 15, 1992.	☐ YES ☐ NO
♦	10.	Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which has dispensed more than 10,000 gallons of gasoline in any calendar month after January 1, 1991 and for which construction began prior to November 15, 1992.	☐ YES ☐ NO
♦	11.	Transfers are made to stationary storage tanks located at a motor vehicle fuel dispensing facility which commenced construction on or after November 15, 1992.	☐ YES ☐ NO
♦	12.	At facilities located in Ellis, Johnson, Kaufman, Parker, or Rockwall County, transfers are made to stationary storage tanks located at a facility which has dispensed at least 10,000 gallons of gasoline but less than 125,000 gallons of gasoline in a calendar month after April 30, 2005.	☐ YES ☐ NO
	F.	**Control of VOC Leaks from Transport Vessels (Complete this section for GOP applications for GOPs 511, 512, 513 and 514 only)**	
♦	1.	Tank-truck tanks are filled with, or emptied of, gasoline at a facility that is subject to 30 TAC § 115.214(a)(1)(C) or 115.224(2) within the application area.	☐ YES ☐NO ☐ N/A

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III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	F.	**Control of VOC Leaks from Transport Vessels (Complete this section for GOP applications for GOPs 511, 512, 513 and 514 only) (continued)**	
♦	2.	Tank-truck tanks are filled with non-gasoline VOCs having a TVP greater than or equal to 0.5 psia under actual storage conditions at a facility subject to 30 TAC § 115.214(a)(1)(C) within the application area.	☐ YES ☐ NO ☐ N/A
♦	3.	Tank-truck tanks are filled with, or emptied of, gasoline at a facility that is subject to 30 TAC § 115.214(b)(1)(C) or 115.224(2) within the application area.	☐ YES ☐ NO ☐ N/A
	G.	**Control of Vehicle Refueling Emissions (Stage II) at Motor Vehicle Fuel Dispensing Facilities**	
♦	1.	The application area includes one or more motor vehicle fuel dispensing facilities and gasoline is transferred from a stationary storage container into motor vehicle fuel tanks. *If the response to Question III.G.1 is "NO" or "N/A," go to Section III.H.*	☐ YES ☒ NO ☐ N/A
♦	2.	The application area includes facilities that began construction on or after November 15, 1992 and prior to May 16, 2012.	☐ YES ☐ NO
♦	3.	The application area includes facilities that began construction prior to November 15, 1992. *If the responses to Questions III.G.2 and Question III.G.3 are both "NO," go to Section III.H.*	☐ YES ☐ NO
♦	4.	The application area includes only facilities that have a monthly throughput of less than 10,000 gallons of gasoline.	☐ YES ☐ NO
♦	5.	The decommissioning of all Stage II vapor recovery control equipment located in the application area has been completed and the decommissioning notice submitted.	☐ YES ☐ NO

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III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	H.	**Control Of Reid Vapor Pressure (RVP) of Gasoline**	
♦	1.	The application area includes stationary tanks, reservoirs, or other containers holding gasoline that may ultimately be used in a motor vehicle in El Paso County. *If the response to Question III.H.1 is "NO" or "N/A," go to Section III.I.*	☐ YES ☐ NO ☒ N/A
♦	2.	The application area includes stationary tanks, reservoirs, or other containers holding gasoline that will be used exclusively for the fueling of agricultural implements.	☐ YES ☐ NO
♦	3.	The application area includes a motor vehicle fuel dispensing facility.	☐ YES ☐ NO
♦	4.	The application area includes stationary tanks, reservoirs, or other containers holding gasoline and having a nominal capacity of 500 gallons or less.	☐ YES ☐ NO
	I.	**Process Unit Turnaround and Vacuum-Producing Systems in Petroleum Refineries**	
	1.	The application area is located at a petroleum refinery.	☐ YES ☒ NO
	J.	**Surface Coating Processes (Complete this section for GOP applications only.)**	
♦	1.	Surface coating operations (other than those performed on equipment located on-site and in-place) that meet the exemption specified in 30 TAC § 115.427(a)(3)(A) or 115.427(b)(1) are performed in the application area.	☐ YES ☐ NO ☐ N/A

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III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	K.	**Cutback Asphalt**	
	1.	Conventional cutback asphalt containing VOC solvents for the paving of roadways, driveways, or parking lots, is used or specified for use in the application area by a state, municipal, or county agency. *If the response to Question III.K.1 is "N/A," go to Section III.L.*	☐ YES ☒ NO ☐ N/A
	2.	The use, application, sale, or offering for sale of conventional cutback asphalt containing VOC solvents for the paving of roadways, driveways, or parking lots occurs in the application area.	☐ YES ☒ NO ☐ N/A
	3.	Asphalt emulsion is used or produced within the application area.	☐ YES ☒ NO
	4.	The application area is using an alternate control requirement as specified in 30 TAC § 115.513. *If the response to Question III.K.4 is "NO," go to Section III.L.*	☐ YES ☒ NO
	5.	The application area uses, applies, sells, or offers for sale asphalt concrete, made with cutback asphalt, that meets the exemption specified in 30 TAC § 115.517(1).	☐ YES ☐ NO
	6.	The application area uses, applies, sells, or offers for sale cutback asphalt that is used solely as a penetrating prime coat.	☐ YES ☐ NO
	7.	The applicant using cutback asphalt is a state, municipal, or county agency.	☐ YES ☐ NO
	L.	**Degassing of Storage Tanks, Transport Vessels and Marine Vessels**	
♦	1.	The application area includes degassing operations for stationary, marine, and/or transport vessels. *If the response to Question III.L.1 is "NO" or "N/A," go to Section III.M.*	☒ YES ☐ NO ☐ N/A
♦	2.	Degassing of only ocean-going, self-propelled VOC marine vessels is performed in the application area. *If the response to Question III.L.2 is "YES," go to Section III.M.*	☐ YES ☒ NO ☐ N/A

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III.	**Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)**		
	L.	**Degassing of Storage Tanks, Transport Vessels and Marine Vessels (continued)**	
♦	3.	Degassing of stationary VOC storage vessels with a nominal storage capacity of 1,000,000 gallons or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☒ YES ☐ NO ☐ N/A
♦	4.	Degassing of stationary VOC storage vessels with a nominal storage capacity of 250,000 gallons or more, or a nominal storage capacity of 75,000 gallons and storing materials with a true vapor pressure greater than 2.6 psia, and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☒ YES ☐ NO ☐ N/A
♦	5.	Degassing of VOC transport vessels with a nominal storage capacity of 8,000 gallons or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☐ YES ☐ NO
♦	6.	Degassing of VOC marine vessels with a nominal storage capacity of 10,000 barrels (420,000 gallons) or more and a vapor space partial pressure greater than or equal to 0.5 psia of VOC is performed in the application area.	☐ YES ☒ NO ☐ N/A
♦	7.	Degassing of VOC marine vessels with a nominal storage capacity of 10,000 barrels (420,000 gallons) and a vapor space partial pressure ≥ 0.5 psia that have sustained damage as specified in 30 TAC § 115.547(5) is performed in the application area.	☐ YES ☒ NO ☐ N/A
	M.	**Petroleum Dry Cleaning Systems**	
	1.	The application area contains one or more petroleum dry cleaning facilities that use petroleum based solvents.	☐ YES ☒ NO ☐ N/A

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♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

III. Title 30 TAC Chapter 115 - Control of Air Pollution from Volatile Organic Compounds (continued)		
N. Vent Gas Control (Highly-reactive volatile organic compounds (HRVOC)		
1.	The application area includes one or more vent gas streams containing HRVOC.	☐ YES ☒ NO ☐ N/A
2.	The application area includes one or more flares that emit or have the potential to emit HRVOC. *If the responses to Questions III.N.1 and III.N.2 are both "NO" or "N/A," go to Section III.O. If the response to Question III.N.1 is "YES," continue with Question III.N.3.*	☐ YES ☒ NO ☐ N/A
3.	All vent streams in the application area that are routed to a flare contain less than 5.0% HRVOC by weight at all times.	☐ YES ☐ NO
4.	All vent streams in the application area that are not routed to a flare contain less than 100 ppmv HRVOC at all times. *If the responses to Questions III.N.3 and III.N.4 are both "NO," go to Section III.O.*	☐ YES ☐ NO
5.	The application area contains pressure relief valves that are not controlled by a flare.	☐ YES ☐ NO
6.	The application area has at least one vent stream which has no potential to emit HRVOC.	☐ YES ☐ NO
7.	The application area has vent streams from a source described in 30 TAC § 115.727(c)(3)(A) - (H).	☐ YES ☐ NO
O. Cooling Tower Heat Exchange Systems (HRVOC)		
1.	The application area includes one or more cooling tower heat exchange systems that emit or have the potential to emit HRVOC.	☐ YES ☒ NO ☐ N/A

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♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

IV.	**Title 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds**		
	A.	**Applicability**	
♦	1.	The application area is located in the Houston/Galveston/Brazoria, Beaumont/Port Arthur, or Dallas/Fort Worth Eight-Hour area. *For SOP applications, if the response to Question IV.A.1 is "YES," complete Sections IV.B - IV.F and IV.H.* *For GOP applications for GOPs 511, 512, 513, or 514, if the response to Question IV.A.1 is "YES," go to Section IV.F.* *For GOP applications for GOP 517, if the response to Question IV.A.1 is "YES," complete Sections IV.C and IV.F.* *For GOP applications, if the response to Question IV.A.1 is "NO," go to Section VI.*	☒ YES ☐ NO
	2.	The application area is located in Bexar, Comal, Ellis, Hays, or McLennan County and includes a cement kiln. *If the response to Question IV.A.2 is "YES," go to Question IV.H.1.*	☐ YES ☐ NO
	3.	The application area includes a utility electric generator in an east or central Texas county. *See instructions for a list of counties included.* *If the response to Question IV.A.3 is "YES," go to Question IV.G.1.* *If the responses to Questions IV.A.1 - 3 are all "NO," go to Question IV.H.1.*	☐ YES ☐ NO
	B.	**Utility Electric Generation in Ozone Nonattainment Areas**	
	1.	The application area includes units specified in 30 TAC §§ 117.1000, 117.1200, or 117.1300. *If the response to Question IV.B.1 is "NO," go to Question IV.C.1.*	☐ YES ☒ NO
	2.	The application area is complying with a System Cap in 30 TAC §§ 117.1020 or 117.1220.	☐ YES ☐ NO

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IV.	**Title 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds (continued)**		
	C.	**Commercial, Institutional, and Industrial Sources in Ozone Nonattainment Areas**	
♦	1.	The application area is located at a site subject to 30 TAC Chapter 117, Subchapter B and includes units specified in 30 TAC §§ 117.100, 117.300, or 117.400. *For SOP applications, if the response to Question IV.C.1 is "NO," go to Question IV.D.1.* *For GOP applications for GOP 517, if the response to Question IV.C.1 is "NO," go to Section IV.F.*	☒ YES ☐ NO
♦	2.	The application area is located at a site that was a major source of NO_X before November 15, 1992.	☒ YES ☐ NO ☐ N/A
♦	3.	The application area includes an electric generating facility required to comply with the System Cap in 30 TAC § 117.320.	☐ YES ☒ NO
	D.	**Adipic Acid Manufacturing**	
	1.	The application area is located at, or part of, an adipic acid production unit.	☐ YES ☒ NO ☐ N/A
	E.	**Nitric Acid Manufacturing - Ozone Nonattainment Areas**	
	1.	The application area is located at, or part of, a nitric acid production unit.	☐ YES ☒ NO ☐ N/A
	F.	**Combustion Control at Minor Sources in Ozone Nonattainment Areas - Boilers, Process Heaters, Stationary Engines and Gas Turbines**	
♦	1.	The application area is located at a site that is a minor source of NO_X in the Houston/Galveston/Brazoria or Dallas/Fort Worth Eight-Hour areas (except for Wise County). *For SOP applications, if the response to Question IV.F.1 is "NO," go to Question IV.G.1.* *For GOP applications, if the response to Question IV.F.1 is "NO," go to Section VI.*	☐ YES ☒ NO
♦	2.	The application area is located in the Houston/Galveston/Brazoria area and has units that qualify for an exemption under 30 TAC § 117.2003(a).	☐ YES ☐ NO

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IV.	**Title 30 TAC Chapter 117 - Control of Air Pollution from Nitrogen Compounds (continued)**		
	F.	**Combustion Control at Minor Sources in Ozone Nonattainment Areas - Boilers, Process Heaters, Stationary Engines and Gas Turbines (continued)**	
♦	3.	The application area is located in the Houston/Galveston/Brazoria area and has units that qualify for an exemption under 30 TAC § 117.2003(b).	☐ YES ☐ NO
♦	4.	The application area is located in the Dallas/Fort Worth Eight-Hour area (except for Wise County) and has units that qualify for an exemption under 30 TAC § 117.2103.	☐ YES ☐ NO
♦	5.	The application area has units subject to the emission specifications under 30 TAC §§ 117.2010 or 30 TAC § 117.2110.	☐ YES ☐ NO
	G.	**Utility Electric Generation in East and Central Texas**	
	1.	The application area includes utility electric power boilers and/or stationary gas turbines (including duct burners used in turbine exhaust ducts) that were placed into service before December 31, 1995. *If the response to Question IV.G.1 is "NO," go to Question IV.H.1.*	☐ YES ☒ NO
	2.	The application area is complying with the System Cap in 30 TAC § 117.3020.	☐ YES ☐ NO
	H.	**Multi-Region Combustion Control - Water Heaters, Small Boilers, and Process Heaters**	
	1.	The application area includes a manufacturer, distributor, retailer or installer of natural gas fired water heaters, boilers or process heaters with a maximum rated capacity of 2.0 MMBtu/hr or less. *If the response to question IV.H.1 is "NO," go to Section V.*	☐ YES ☒ NO
	2.	All water heaters, boilers or process heaters manufactured, distributed, retailed or installed qualify for an exemption under 30 TAC § 117.3203.	☐ YES ☐ NO

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V.	**Title 40 Code of Federal Regulations Part 59 (40 CFR Part 59) - National Volatile Organic Compound Emission Standards for Consumer and Commercial Products**	
A.	**Subpart B - National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings**	
1.	The application area manufactures automobile refinish coatings or coating components and sells or distributes these coatings or coating components in the United States.	☐ YES ☒ NO
2.	The application area imports automobile refinish coatings or coating components, manufactured on or after January 11, 1999, and sells or distributes these coatings or coating components in the United States. *If the responses to Questions V.A.1 and V.A.2 are both "NO," go to Section V.B.*	☐ YES ☒ NO
3.	All automobile refinish coatings or coating components manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.100(c)(1) - (6).	☐ YES ☐ NO
B.	**Subpart C - National Volatile Organic Compound Emission Standards for Consumer Products**	
1.	The application area manufactures consumer products for sale or distribution in the United States.	☐ YES ☒ NO
2.	The application area imports consumer products manufactured on or after December 10, 1998 and sells or distributes these consumer products in the United States.	☐ YES ☒ NO
3.	The application area is a distributor of consumer products whose name appears on the label of one or more of the products. *If the responses to Questions V.B.1 - V.B.3 are all "NO," go to Section V.C.*	☐ YES ☒ NO
4.	All consumer products manufactured, imported, or distributed by the application area meet one or more of the exemptions specified in 40 CFR § 59.201(c)(1) - (7).	☐YES ☐NO

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V.	**Title 40 Code of Federal Regulations Part 59 (40 CFR Part 59) - National Volatile Organic Compound Emission Standards for Consumer and Commercial Products (continued)**		
	C.	**Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings**	
	1.	The application area manufactures or imports architectural coatings for sale or distribution in the United States.	☐ YES ☒ NO
	2.	The application area manufactures or imports architectural coatings that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act. *If the responses to Questions V.C.1-2 are both "NO," go to Section V.D.*	☐ YES ☒ NO
	3.	All architectural coatings manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR §59.400(c)(1)-(5).	☐ YES ☐ NO
	D.	**Subpart E - National Volatile Organic Compound Emission Standards for Aerosol Coatings**	
	1.	The application area manufactures or imports aerosol coating products for sale or distribution in the United States.	☐ YES ☒ NO
	2.	The application area is a distributor of aerosol coatings for resale or distribution in the United States.	☐ YES ☒ NO
	E.	**Subpart F - Control of Evaporative Emissions From New and In-Use Portable Fuel Containers**	
	1.	The application area manufactures or imports portable fuel containers for sale or distribution in the United States. *If the response to Question V.E.1 is "NO," go to Section VI.*	☐ YES ☒ NO
	2.	All portable fuel containers manufactured or imported by the application area meet one or more of the exemptions specified in 40 CFR § 59.605(a) - (c).	☐ YES ☐ NO
VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards**		
	A.	**Applicability**	
♦	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 60 subparts. *If the response to Question VI.A.1 is "NO," go to Section VII.*	☒ YES ☐ NO
	B.	**Subpart Y - Standards of Performance for Coal Preparation and Processing Plants**	
	1.	The application area is located at a coal preparation and processing plant. *If the response to Question VI.B.1 is "NO," go to Section VI.C.*	☐ YES ☒ NO

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	B.	**Subpart Y - Standards of Performance for Coal Preparation and Processing Plants (continued)**	
	2.	The coal preparation and processing plant has a design capacity greater than 200 tons per day (tpd). *If the response to Question VI.B.2 is "NO," go to Section VI.C.*	☐ YES ☐ NO
	3.	The plant has an option to enforceably limit its operating level to less than 200 tpd and is choosing this option. *If the response to Question VI.B.3 is "YES," go to Section VI.C.*	☐ YES ☐ NO
	4.	The plant contains an open storage pile, as defined in § 60.251, as an affected facility. *If the response to Question VI.B.4 is "NO," go to Section VI.C.*	☐ YES ☐ NO
	5.	The open storage pile was constructed, reconstructed or modified after May 27, 2009.	☐ YES ☐ NO
	C.	**Subpart GG - Standards of Performance for Stationary Gas Turbines (GOP applicants only)**	
♦	1.	The application area includes one or more stationary gas turbines that have a heat input at peak load greater than or equal to 10 MMBtu/hr (10.7GJ/hr), based on the lower heating value of the fuel fired. *If the response to Question VI.C.1 is "NO" or "N/A," go to Section VI.D.*	☐ YES ☐ NO ☐ N/A
♦	2.	One or more of the affected facilities were constructed, modified, or reconstructed after October 3, 1977 and prior to February 19, 2005. *If the response to Question VI.C.2 is "NO," go to Section VI.D.*	☐ YES ☐ NO
♦	3.	One or more stationary gas turbines in the application area are using a previously approved alternative fuel monitoring schedule as specified in 40 CFR § 60.334(h)(4).	☐ YES ☐ NO
♦	4.	The exemption specified in 40 CFR § 60.332(e) is being utilized for one or more stationary gas turbines in the application area.	☐ YES ☐ NO

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	C.	**Subpart GG - Standards of Performance for Stationary Gas Turbines (GOP applicants only) (continued)**	
♦	5.	One or more stationary gas turbines subject to 40 CFR Part 60, Subpart GG in the application area is injected with water or steam for the control of nitrogen oxides.	☐ YES ☐ NO
	D.	**Subpart XX - Standards of Performance for Bulk Gasoline Terminals**	
	1.	The application area includes bulk gasoline terminal loading racks. *If the response to Question VI.D.1 is "NO," go to Section VI.E.*	☐ YES ☒ NO ☐ N/A
	2.	One or more of the loading racks were constructed or modified after December 17, 1980.	☐ YES ☐ NO
	E.	**Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: Sulfur Dioxide (SO_2) Emissions**	
♦	1.	The application area includes affected facilities identified in 40 CFR § 60.640(a) that process natural gas (onshore). *For SOP applications, if the response to Question VI.E.1 is "NO," go to Section VI.F.* *For GOP applications, if the response to Question VI.E.1 is "NO" or "N/A," go to Section VI.H.*	☐ YES ☒ NO
♦	2.	The affected facilities commenced construction or modification after January 20, 1984 and on or before August 23, 2011. *For SOP applications, if the response to Question VI.E.2 is "NO," go to Section VI.F.* *For GOP applications, if the response to Question VI.E.2 is "NO," go to Section VI.H.*	☐ YES ☐ NO
♦	3.	The application area includes a gas sweetening unit with a design capacity greater than or equal to 2 long tons per day (LTPD) of hydrogen sulfide but operates at less than 2 LTPD. *For SOP applications, if the response to Question VI.E.3 is "NO," go to Section VI.F.* *For GOP applications, if the response to Question VI.E.3 is "NO," go to Section VI.H.*	☐ YES ☐ NO

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	E.	**Subpart LLL - Standards of Performance for Onshore Natural Gas Processing: Sulfur Dioxide (SO_2) Emissions (continued)**	
♦	4.	Federally enforceable operating limits have been established in the preconstruction authorization limiting the gas sweetening unit to less than 2 LTPD. *For SOP applications, if the response to Question VI.E.4. is "NO," go to Section VI.F.* *For GOP applications, if the response to Question VI.E.4. is "NO," go to Section VI.H.*	☐ YES ☐ NO
♦	5.	Please provide the Unit ID(s) for the gas sweetening unit(s) that have established federally enforceable operating limits in the space provided below.	
	F.	**Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants**	
	1.	The application area includes affected facilities identified in 40 CFR § 60.670(a)(1) that are located at a fixed or portable nonmetallic mineral processing plant. *If the response to Question VI.F.1 is "NO," go to Section VI.G.*	☐ YES ☒ NO
	2.	Affected facilities identified in 40 CFR § 60.670(a)(1) and located in the application area are subject to 40 CFR Part 60, Subpart OOO.	☐ YES ☐ NO
	G.	**Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems**	
	1.	The application area is located at a petroleum refinery and includes one or more of the affected facilities identified in 40 CFR § 60.690(a)(2) - (4) for which construction, modification, or reconstruction was commenced after May 4, 1987. *If the response to Question VI.G.1 is "NO," go to Section VI.H.*	☐ YES ☒ NO
	2.	The application area includes storm water sewer systems.	☐ YES ☐ NO

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	G.	**Subpart QQQ - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems (continued)**	
	3.	The application area includes ancillary equipment which is physically separate from the wastewater system and does not come in contact with or store oily wastewater.	☐ YES ☐ NO
	4.	The application area includes non-contact cooling water systems.	☐ YES ☐ NO
	5.	The application area includes individual drain systems. *If the response to Question VI.G.5 is "NO," go to Section VI.H.*	☐ YES ☐ NO
	6.	The application area includes one or more individual drain systems that meet the exemption specified in 40 CFR § 60.692-2(d).	☐ YES ☐ NO
	7.	The application area includes completely closed drain systems.	☐ YES ☐ NO
	H.	**Subpart AAAA - Standards of Performance for Small Municipal Waste Incineration Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 6, 2004**	
♦	1.	The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator. *If the response to Question VI.H.1. is "N/A," go to Section VI.I. If the response to Question VI.H.1 is "NO," go to Question VI.H.4.*	☐ YES ☐ NO ☒ N/A
♦	2.	The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator, constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006.	☐ YES ☐ NO
♦	3.	The application area includes at least one small municipal waste incineration unit, other than an air curtain incinerator, constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006.	☐ YES ☐ NO
♦	4.	The application area includes at least one air curtain incinerator. *If the response to Question VI.H.4 is "NO," go to Section VI.I.*	☐ YES ☐ NO

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♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)**		
	H.	**Subpart AAAA - Standards of Performance for Small Municipal Waste Incineration Units for Which Construction Commenced After August 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 6, 2004 (continued)**	
♦	5.	The application area includes at least one air curtain incinerator constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006. *If the response to Question VI.H.5 is "NO," go to Question VI.H.7.*	☐ YES ☐ NO
♦	6.	All air curtain incinerators constructed after August 30, 1999 or modified or reconstructed on or after June 6, 2006 combust only yard waste.	☐ YES ☐ NO
♦	7.	The application area includes at least one air curtain incinerator constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006.	☐ YES ☐ NO
♦	8.	All air curtain incinerators constructed before August 30, 1999 and not modified or reconstructed on or after June 6, 2006 combust only yard waste.	☐ YES ☐ NO
	I.	**Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 1, 2001**	
♦	1.	The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator. *If the response to Question VI.I.1 is "N/A," go to Section VI.J. If the response to Question VI.I.1 is "NO," go to Question VI.I.4.*	☐ YES ☐ NO ☒ N/A
♦	2.	The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator, constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001.	☐ YES ☐ NO

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VI. Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)			
	I. Subpart CCCC - Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for Which Construction Commenced After November 30, 1999 or for Which Modification or Reconstruction Commenced on or After June 1, 2001 (continued)		
♦	3.	The application area includes at least one commercial or industrial solid waste incineration unit, other than an air curtain incinerator, constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001.	☐ YES ☐ NO
♦	4.	The application area includes at least one air curtain incinerator. *If the response to Question VI.I.4 is "NO," go to Section VI.J.*	☐ YES ☐ NO
♦	5.	The application area includes at least one air curtain incinerator, constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001. *If the response to Question VI.I.5 is "NO," go to VI.I.7.*	☐ YES ☐ NO
♦	6.	All air curtain incinerators constructed after November 30, 1999 or modified or reconstructed on or after June 1, 2001 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ YES ☐ NO
♦	7.	The application area includes at least one air curtain incinerator, constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001.	☐ YES ☐ NO
♦	8.	All air curtain incinerators constructed before November 30, 1999 and not modified or reconstructed on or after June 1, 2001 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ YES ☐ NO

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VI. Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (continued)			
	J. Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006		
♦	1.	The application area includes at least one very small municipal waste incineration unit or institutional incineration unit, other than an air curtain incinerator. *If the response to Question VI.J.1 is "N/A," go to Section VI.K.1. If the response to Question VI.J.1 is "NO," go to Question VI.J.4.*	☐ YES ☐ NO ☒ N/A
♦	2.	The application area includes at least one very small municipal waste incineration unit, other than an air curtain incinerator, constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006.	☐ YES ☐ NO
♦	3.	The application area includes at least one very small municipal waste incineration unit, other than an air curtain incinerator, constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006.	☐ YES ☐ NO
♦	4.	The application area includes at least one air curtain incinerator. *If the response to Question VI.J.4 is "NO," go to Section VII.*	☐ YES ☐ NO
♦	5.	The application area includes at least one air curtain incinerator constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006. *If the response to Question VI.J.5 is "NO," go to Question VI.J.7.*	☐ YES ☐ NO
♦	6.	All air curtain incinerators constructed after December 9, 2004 or modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ YES ☐ NO
♦	7.	The application area includes at least one air curtain incinerator constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006.	☐ YES ☐ NO

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VI.	**Title 40 Code of Federal Regulations Part 60 - New Source Performance Standards (NSPS) (continued)**		
	J.	**Subpart EEEE - Standards of Performance for Other Solid Waste Incineration Units for Which Construction Commenced After December 9, 2004 or for Which Modification or Reconstruction Commenced on or After June 16, 2006 (continued)**	
♦	8.	All air curtain incinerators constructed before December 9, 2004 and not modified or reconstructed on or after June 16, 2006 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ YES ☐ NO
♦	9.	The air curtain incinerator is located at an institutional facility and is a distinct operating unit of the institutional facility that generated the waste.	☐ YES ☐ NO
♦	10.	The air curtain incinerator burns less than 35 tons per day of wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ YES ☐ NO
	K.	**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**	
♦	1.	The application area includes one or more of the onshore affected facilities listed in 40 CFR § 60.5365(a)-(g) that are subject to 40 CFR Part 60, Subpart OOOO.	☐ YES ☒ NO
VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants**		
	A.	**Applicability**	
♦	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 61 subparts. *If the response to Question VII.A.1 is "NO" or "N/A," go to Section VIII.*	☒ YES ☐ NO ☐ N/A
	B.	**Subpart F - National Emission Standard for Vinyl Chloride**	
	1.	The application area is located at a plant which produces ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene, vinyl chloride by any process, and/or one or more polymers containing any fraction of polymerized vinyl chloride.	☐ YES ☒ NO
	C.	**Subpart J - National Emission Standard for Benzene Emissions for Equipment Leaks (Fugitive Emission Sources) of Benzene (Complete this section for GOP applications only)**	
♦	1.	The application area includes equipment in benzene service.	☐ YES ☒ NO ☐ N/A

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
D. Subpart L - National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants		
1.	The application area is located at a coke by-product recovery plant and includes one or more of the affected sources identified in 40 CFR § 61.130(a) - (b). *If the response to Question VII.D.1 is "NO," go to Section VII.E.*	☐ YES ☒ NO
2.	The application area includes equipment in benzene service as determined by 40 CFR § 61.137(b).	☐ YES ☐ NO
3.	The application area has elected to comply with the provisions of 40 CFR § 61.243-1 and 40 CFR § 61.243-2.	☐ YES ☐ NO
E. Subpart M - National Emission Standard for Asbestos		
Applicability		
1.	The application area includes sources, operations, or activities specified in 40 CFR §§ 61.143, 61.144, 61.146, 61.147, 61.148, or 61.155. *If the response to Question VII.E.1 is "NO," go to Section VII.F.*	☐ YES ☒ NO
Roadway Construction		
2.	The application area includes roadways constructed or maintained with asbestos tailings or asbestos-containing waste material.	☐ YES ☐ NO
Manufacturing Commercial Asbestos		
3.	The application area includes a manufacturing operation using commercial asbestos. *If the response to Question VII.E.3 is "NO," go to Question VII.E.4.*	☐ YES ☐ NO
a.	Visible emissions are discharged to outside air from the manufacturing operation	☐ YES ☐ NO
b.	An alternative emission control and waste treatment method is being used that has received prior U.S. Environmental Protection Agency (EPA) approval.	☐ YES ☐ NO

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
E. Subpart M - National Emission Standard for Asbestos (continued)		
***Manufacturing Commercial Asbestos* (continued)**		
c.	Asbestos-containing waste material is processed into non-friable forms.	☐ YES ☐ NO
d.	Asbestos-containing waste material is adequately wetted.	☐ YES ☐ NO
e.	Alternative filtering equipment is being used that has received EPA approval.	☐ YES ☐ NO
f.	A high efficiency particulate air (HEPA) filter is being used that is certified to be at least 99.97% efficient for 0.3 micron particles	☐ YES ☐ NO
g.	The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ YES ☐ NO
Asbestos Spray Application		
4.	The application area includes operations in which asbestos-containing materials are spray applied. *If the response to Question VII.E.4 is "NO," go to Question VII.E.5.*	☐ YES ☐ NO
a.	Asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and are not friable after drying. *If the response to Question VII.E.4.a is "YES," go to Question VII.E.5.*	☐ YES ☐ NO
b.	Spray-on applications on buildings, structures, pipes, and conduits do not use material containing more than 1% asbestos.	☐ YES ☐ NO
c.	An alternative emission control and waste treatment method is being used that has received prior EPA approval.	☐ YES ☐ NO

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
E. Subpart M - National Emission Standard for Asbestos (continued)		
***Asbestos Spray Application* (continued)**		
d.	Asbestos-containing waste material is processed into non-friable forms.	☐ YES ☐ NO
e.	Asbestos-containing waste material is adequately wetted.	☐ YES ☐ NO
f.	Alternative filtering equipment is being used that has received EPA approval.	☐ YES ☐ NO
g.	A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3 micron particles.	☐ YES ☐ NO
h.	The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ YES ☐ NO
Fabricating Commercial Asbestos		
5.	The application area includes a fabricating operation using commercial asbestos. *If the response to Question VII.E.5 is "NO," go to Question VII.E.6.*	☐ YES ☐ NO
a.	Visible emissions are discharged to outside air from the manufacturing operation.	☐ YES ☐ NO
b.	An alternative emission control and waste treatment method is being used that has received prior EPA approval.	☐ YES ☐ NO
c.	Asbestos-containing waste material is processed into non-friable forms.	☐ YES ☐ NO
d.	Asbestos-containing waste material is adequately wetted.	☐ YES ☐ NO
e.	Alternative filtering equipment is being used that has received EPA approval.	☐ YES ☐ NO

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
E. Subpart M - National Emission Standard for Asbestos (continued)		
***Fabricating Commercial Asbestos* (continued)**		
	f. A HEPA filter is being used that is certified to be at least 99.97% efficient for 0.3 micron particles.	☐ YES ☐ NO
	g. The EPA has authorized the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals.	☐ YES ☐ NO
Non-sprayed Asbestos Insulation		
	6. The application area includes insulating materials (other than spray applied insulating materials) that are either molded and friable or wet-applied and friable after drying.	☐ YES ☐ NO
Asbestos Conversion		
	7. The application area includes operations that convert regulated asbestos-containing material and asbestos-containing waste material into nonasbestos (asbestos-free) material.	☐ YES ☐ NO
F. Subpart P - National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities		
	1. The application area is located at a metallic arsenic production plant or at an arsenic trioxide plant that processes low-grade arsenic bearing materials by a roasting condensation process.	☐ YES ☒ NO
G. Subpart BB - National Emission Standard for Benzene Emissions from Benzene Transfer Operations		
	1. The application area is located at a benzene production facility and/or bulk terminal. *If the response to Question VII.G.1 is "NO," go to Section VII.H.*	☐ YES ☒ NO
	2. The application area includes benzene transfer operations at marine vessel loading racks.	☐ YES ☐ NO

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
G. Subpart BB - National Emission Standard for Benzene Emissions from Benzene Transfer Operations (continued)		
3.	The application area includes benzene transfer operations at railcar loading racks.	☐ YES ☐ NO
4.	The application area includes benzene transfer operations at tank-truck loading racks.	☐ YES ☐ NO
H. Subpart FF - National Emission Standard for Benzene Waste Operations		
Applicability		
1.	The application area includes a chemical manufacturing plant, coke by-product recovery plant, or petroleum refinery facility as defined in § 61.341.	☒ YES ☐ NO
2.	The application area is located at a hazardous waste treatment, storage, and disposal (TSD) facility site as described in 40 CFR § 61.340(b). *If the responses to Questions VII.H.1 and VII.H.2 are both "NO," go to Section VIII.*	☐ YES ☒ NO
3.	The application area is located at a site that has no benzene onsite in wastes, products, byproducts, or intermediates. *If the response to Question VII.H.3 is "YES," go to Section VIII.*	☐ YES ☒ NO
4.	The application area is located at a site having a total annual benzene quantity from facility waste less than 1 megagram per year (Mg/yr). *If the response to Question VII.H.4 is "YES," go to Section VIII*	☒ YES ☐ NO
5.	The application area is located at a site having a total annual benzene quantity from facility waste greater than or equal to 1 Mg/yr but less than 10 Mg/yr. *If the response to Question VII.H.5 is "YES," go to Section VIII.*	☐ YES ☐ NO

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)		
***Applicability* (continued)**		
6.	The flow-weighted annual average benzene concentration of each waste stream at the site is based on documentation.	☐ YES ☐ NO
7.	The application area has waste streams with flow-weighted annual average water content of 10% or greater.	☐ YES ☐ NO
Waste Stream Exemptions		
8.	The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(2) (the flow-weighted annual average benzene concentration is less than 10 ppmw).	☐ YES ☐ NO
9.	The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(3) because process wastewater has a flow rate less than 0.02 liters per minute or an annual wastewater quantity less than 10 Mg/yr.	☐ YES ☐ NO
10.	The application area has waste streams that meet the exemption specified in 40 CFR § 61.342(c)(3) because the total annual benzene quantity is less than or equal to 2 Mg/yr.	☐ YES ☐ NO
11.	The application area transfers waste off-site for treatment by another facility.	☐ YES ☐ NO
12.	The application area is complying with 40 CFR § 61.342(d).	☐ YES ☐ NO
13.	The application area is complying with 40 CFR § 61.342(e). *If the response to Question VII.H.13 is "NO," go to Question VII.H.15.*	☐ YES ☐ NO
14.	The application area has facility waste with a flow weighted annual average water content of less than 10%.	☐ YES ☐ NO

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VII. Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)		
H. Subpart FF - National Emission Standard for Benzene Waste Operations (continued)		
Container Requirements		
15.	The application area has containers, as defined in 40 CFR § 61.341, that receive non-exempt benzene waste. *If the response to Question VII.H.15 is "NO," go to Question VII.H.18.*	☐ YES ☐ NO
16.	The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. *If the response to Question VII.H.16 is "YES," go to Question VII.H.18.*	☐ YES ☐ NO
17.	Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	☐ YES ☐ NO
Individual Drain Systems		
18.	The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage non-exempt benzene waste. *If the response to Question VII.H.18 is "NO," go to Question VII.H.25.*	☐ YES ☐ NO
19.	The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. *If the response to Question VII.H.19 is "YES," go to Question VII.H.25.*	☐ YES ☐ NO
20.	The application area has individual drain systems complying with 40 CFR § 61.346(a). *If the response to Question VII.H.20 is "NO," go to Question VII.H.22.*	☐ YES ☐ NO
21.	Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	☐ YES ☐ NO

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VII.	**Title 40 Code of Federal Regulations Part 61 - National Emission Standards for Hazardous Air Pollutants (continued)**		
	H.	**Subpart FF - National Emission Standard for Benzene Waste Operations (continued)**	
		***Individual Drain Systems* (continued)**	
	22.	The application area has individual drain systems complying with 40 CFR § 61.346(b). *If the response to Question VII.H.22 is "NO," go to Question VII.H.25.*	☐ YES ☐ NO
	23.	Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	☐ YES ☐ NO
	24.	Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	☐ YES ☐ NO
		Remediation Activities	
	25.	Remediation activities take place at the application area subject to 40 CFR Part 61, Subpart FF.	☐ YES ☐ NO
VIII.	**Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories**		
	A.	**Applicability**	
♦	1.	The application area includes a unit(s) that is subject to one or more 40 CFR Part 63 subparts other than subparts made applicable by reference under subparts in 40 CFR Part 60, 61 or 63. *See instructions for 40 CFR Part 63 subparts made applicable only by reference.*	☒ YES ☐ NO
	B.	**Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry**	
	1.	The application area is located at a plant site that is a major source as defined in the Federal Clean Air Act § 112(a). *If the response to Question VIII.B.1 is "NO," go to Section VIII.D.*	☒ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
B. Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (continued)		
2.	The application area is located at a site that includes at least one chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii). *If the response to Question VIII.B.2 is "NO," go to Section VIII.D.*	☒ YES ☐ NO
3.	The application area is located at a site that includes at least one chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii) and uses as a reactant or manufactures as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F.	☒ YES ☐ NO
4.	The application area includes a chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii) and uses as a reactant or manufactures as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F.	☒ YES ☐ NO
5.	The application area includes a chemical manufacturing process unit, as defined in 40 CFR § 63.101, that manufactures as a primary product one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or (b)(1)(ii) and does <u>not</u> use as a reactant or manufacture as a product, or co-product, one or more of the organic hazardous air pollutants listed in table 2 of 40 CFR Part 63, Subpart F. *If the response to Questions VIII.B.3, B.4 and B.5 are all "NO," go to Section VIII.D.*	☐ YES ☒ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater		
Applicability		
1.	The application area is located at a site that is subject to 40 CFR 63, Subpart F and the application area includes process vents, storage vessels, transfer racks, or waste streams associated with a chemical manufacturing process subject to 40 CFR 63, Subpart F. *If the response to Question VIII.C.1 is "NO," go to Section VIII.D.*	☒ YES ☐ NO
2.	The application area includes fixed roofs, covers, and/or enclosures that are required to comply with 40 CFR § 63.148.	☒ YES ☐ NO
3.	The application area includes vapor collection systems or closed-vent systems that are required to comply with 40 CFR § 63.148. *If the response to Question VIII.C.3 is "NO," go to Question VIII.C.8.*	☒ YES ☐ NO
4.	The application area includes vapor collection systems or closed-vent systems that are constructed of hard-piping.	☒ YES ☐ NO
5.	The application area includes vapor collection systems or closed-vent systems that contain bypass lines that could divert a vent stream away from a control device and to the atmosphere. *If the response to Question VIII.C.5 is "NO," go to Question VIII.C.8.*	☒ YES ☐ NO
Vapor Collection and Closed Vent Systems		
6.	Flow indicators are installed, calibrated, maintained, and operated at the entrances to bypass lines in the application area.	☒ YES ☐ NO
7.	Bypass lines in the application area are secured in the closed position with a car-seal or a lock-and-key type configuration.	☒ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
Transfer Racks		
8.	The application area includes Group 1 transfer racks that load organic HAPs.	☐ YES ☒ NO
Process Wastewater Streams		
9.	The application area includes process wastewater streams. *If the response to Question VIII.C.9 is "NO," go to Question VIII.C.31.*	☒ YES ☐ NO
10.	The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Part 61, Subpart FF. *If the response to Question VIII.C.10 is "NO," go to Question VIII.C.12.*	☒ YES ☐ NO
11.	The application area includes process wastewater streams that are complying with 40 CFR §§ 63.110(e)(1)(i) and (e)(1)(ii).	☐ YES ☒ NO
12.	The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Part 61, Subpart F. *If the response to Question VIII.C.12 is "NO," go to Question VIII.C.14.*	☐ YES ☒ NO
13.	The application area includes process wastewater streams utilizing the compliance option specified in 40 CFR § 63.110(f)(4)(ii).	☐ YES ☐ NO
14.	The application area includes process wastewater streams that are also subject to the provisions of 40 CFR Parts 260 through 272. *If the response to Question VIII.C.14 is "NO," go to Question VIII.C.17.*	☐ YES ☒ NO
15.	The application area includes process wastewater streams complying with 40 CFR § 63.110(e)(2)(i).	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
***Process Wastewater Streams* (continued)**		
16.	The application are includes process wastewater streams complying with 40 CFR § 63.110(e)(2)(ii).	☐ YES ☐ NO
17.	The application area includes process wastewater streams, located at existing sources, that are designated as Group 1; are required to be treated as Group 1 under 40 CFR § 63.110; or are determined to be Group 1 for Table 9 compounds.	☐ YES ☒ NO
18.	The application area includes process wastewater streams, located at existing sources that are Group 2.	☒ YES ☐ NO
19.	The application area includes process wastewater streams, located at new sources, that are designated as Group 1; required to be treated as Group 1 under 40 CFR § 63.110; or are determined to be Group 1 for Table 8 or Table 9 compounds.	☐ YES ☒ NO
20.	The application area includes process wastewater streams, located at new sources that are Group 2 for both Table 8 and Table 9 compounds.	☐ YES ☒ NO
21.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.C.21 is "YES," go to Question VIII.C.31.*	☐ YES ☐ NO ☒ N/A
22.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.C.22 is "NO," go to Question VIII.C.24.*	☐ YES ☐ NO ☒ N/A
23.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ YES ☒ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
***Process Wastewater Streams* (continued)**		
24.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ YES ☒ NO
25.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.C.24 - VIII.C.25 are both "NO," go to Question VIII.C.27.*	☐ YES ☒ NO
26.	The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ YES ☒ NO
27.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ YES ☒ NO
Drains		
28.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.C.28 is "NO," go to Question VIII.C.31.*	☐ YES ☒ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (continued)		
***Drains* (continued)**		
29.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ YES ☐ NO
30.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ YES ☐ NO
31.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a chemical manufacturing process unit that meets the criteria of 40 CFR § 63.100(b). *If the response to Question VIII.C.31 is "NO," go to Question VIII.C.36.*	☒ YES ☐ NO
32.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes (that are part of a chemical manufacturing process unit) that meet the criteria listed in 40 CFR § 63.149(d). *If the response to Question VIII.C.32 is "NO," go to Question VIII.C.36.*	☐ YES ☒ NO
33.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 9, at any flow rate.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
C. Subpart G-National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operation, and Wastewater (continued)		
***Drains* (continued)**		
34.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 9, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ YES ☐ NO
35.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of a chemical manufacturing process unit that is subject to the new source requirements of 40 CFR § 63.100(l)(1) or (l)(2); and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds listed in 40 CFR Part 63 Subpart G, Table 8, at an average annual flow rate greater than or equal to 0.02 liter per minute.	☐ YES ☐ NO
Gas Streams		
36.	The application area includes gas streams meeting the characteristics of 40 CFR § 63.107(b) - (h) or the criteria of 40 CFR § 63.113(i) and are transferred to a control device not owned or operated by the applicant.	☐ YES ☒ NO
37.	The applicant is unable to comply with 40 CFR §§ 63.113 - 63.118 for one or more reasons described in 40 CFR § 63.100(q)(1), (3), or (5).	☐ YES ☒ NO
D. Subpart N - National Emission Standards for Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks		
1.	The application area includes chromium electroplating or chromium anodizing tanks located at hard chromium electroplating, decorative chromium electroplating, and/or chromium anodizing operations.	☐ YES ☒ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
E.	**Subpart O - Ethylene Oxide Emissions Standards for Sterilization Facilities**	
1.	The application area includes sterilization facilities where ethylene oxide is used in the sterilization or fumigation of materials. *If the response to Question VIII.E.1 is "NO," go to Section VIII.F.*	☐ YES ☒ NO
2.	Sterilization facilities located in the application area are subject to 40 CFR Part 63, Subpart O. *If the response to Question VIII.E.2 is "NO," go to Section VIII.F.*	☐ YES ☐ NO
3.	The sterilization source has used less than 1 ton (907 kg) of ethylene oxide within all consecutive 12-month periods after December 6, 1996.	☐ YES ☐ NO
4.	The sterilization source has used less than 10 tons (9070 kg) of ethylene oxide within all consecutive 12-month periods after December 6, 1996.	☐ YES ☐ NO
F.	**Subpart Q - National Emission Standards for Industrial Process Cooling Towers**	
1.	The application area includes industrial process cooling towers. *If the response to Question VIII.F.1 is "NO," go to Section VIII.G.*	☒ YES ☐ NO
2.	Chromium-based water treatment chemicals have been used on or after September 8, 1994.	☐ YES ☒ NO
G.	**Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)**	
1.	The application area includes a bulk gasoline terminal.	☐ YES ☒ NO
2.	The application area includes a pipeline breakout station. *If the responses to Questions VIII.G.1 and VIII.G.2 are both "NO," go to Section VIII.H.*	☐ YES ☒ NO
3.	The bulk gasoline terminal or pipeline breakout station is located within a contiguous area and under common control with another bulk gasoline terminal or a pipeline breakout station. *If the response to Question VIII.G.3 is "YES," go to Question VIII.G.9.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
G. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (continued)		
4.	The bulk gasoline terminal or pipeline breakout station is located within a contiguous area and under common control with sources, other than bulk gasoline terminals or pipeline breakout stations that emit or have the potential to emit HAPs. *If the response to Question VIII.G.4 is "YES," go to Question VIII.G.9.*	☐ YES ☐ NO
5.	The value 0.04(OE) is less than 5% of the value of the bulk gasoline terminal emissions screening factor (ET) or the pipeline breakout station emissions screening factor (Ep). *If the response to Question VIII.G.5 is "NO," go to Question VIII.G.9.*	☐ YES ☐ NO ☐ N/A
6.	Emissions screening factor less than 0.5 (ET or EP < 0.5). *If the response to Question VIII.G.6 is "YES," go to Section VIII.H.*	☐ YES ☐ NO ☐ N/A
7.	Emissions screening factor greater than or equal to 0.5, but less than 1.0 (0.5 ≤ ET or EP < 1.0). *If the response to Question VIII.G.7 is "YES," go to Section VIII.H*	☐ YES ☐ NO ☐ N/A
8.	Emissions screening factor greater than or equal to 1.0 (ET or EP ≥ 1.0). *If the response to Question VIII.G.8 is "YES," go to Question VIII.G.10.*	☐ YES ☐ NO ☐ N/A
9.	The site at which the application area is located is a major source of HAP. *If the response to Question VIII.G.9 is "NO," go to Section VIII.H*	☐ YES ☐ NO
10.	The application area is using an alternative leak monitoring program as described in 40 CFR § 63.424(f).	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
H. Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry		
1.	The application area includes processes that produce pulp, paper, or paperboard and are located at a plant site that is a major source of HAPs as defined in 40 CFR § 63.2. *If the response to Question VIII.H.1 is "NO," go to Section VIII.I.*	☐ YES ☒ NO
2.	The application area uses processes and materials specified in 40 CFR § 63.440(a)(1) - (3). *If the response to Question VIII.H.2 is "NO," go to Section VIII.I.*	☐ YES ☐ NO
3.	The application area includes one or more sources subject to 40 CFR Part 63, Subpart S that are existing sources. *If the response to Question VIII.H.3 is "NO," go to Section VIII.I.*	☐ YES ☐ NO
4.	The application area includes one or more kraft pulping systems that are existing sources.	☐ YES ☐ NO
5.	The application area includes one or more dissolving-grade bleaching systems that are existing sources at a kraft or sulfite pulping mill.	☐ YES ☐ NO
6.	The application area includes bleaching systems that are existing sources and are complying with the Voluntary Advanced Technology Incentives Program for Effluent Limitation Guidelines in 40 CFR § 430.24. *If the response to Question VIII.H.6 is "NO," go to Section VIII.I.*	☐ YES ☐ NO
7.	The application area includes bleaching systems that are complying with 40 CFR § 63.440(d)(3)(i).	☐ YES ☐ NO
8.	The application area includes bleaching systems that are complying with 40 CFR § 63.440(d)(3)(ii).	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
I.	**Subpart T - National Emission Standards for Halogenated Solvent Cleaning**	
1.	The application area includes an individual batch vapor, in-line vapor, in-line cold, and/or batch cold solvent cleaning machine that uses a hazardous air pollutant (HAP) solvent, or any combination of halogenated HAP solvents, in a total concentration greater than 5% by weight, as a cleaning and/or drying agent.	☐ YES ☒ NO
2.	The application area is located at a major source and includes solvent cleaning machines, qualifying as affected facilities, that use perchloroethylene, trichloroethylene or methylene chloride.	☐ YES ☒ NO
3.	The application area is located at an area source and includes solvent cleaning machines, other than cold batch cleaning machines, that use perchloroethylene, trichloroethylene or methylene chloride.	☐ YES ☒ NO
J.	**Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins**	
1.	The application area includes elastomer product process units and/or wastewater streams and wastewater operations that are associated with elastomer product process units. *If the response to Question VIII.J.1 is "NO," go to Section VIII.K.*	☐ YES ☒ NO
2.	Elastomer product process units and/or wastewater streams and wastewater operations located in the application area are subject to 40 CFR Part 63, Subpart U. *If the response to Question VIII.J.2 is "NO," go to Section VIII.K.*	☐ YES ☐ NO
3.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for organic HAPs as defined in 40 CFR § 63.482.	☐ YES ☐ NO
4.	The application area includes process wastewater streams that are Group 2 for organic HAPs as defined in 40 CFR § 63.482.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
J. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)		
5.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.J.5 is "YES," go to Question VIII.J.15.*	☐ YES ☐ NO
6.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.J.6 is "NO," go to Question VIII.J.8.*	☐ YES ☐ NO
7.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ YES ☐ NO
8.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ YES ☐ NO
9.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.J.8 - VIII.J.9 are both "NO," go to Question VIII.J.11.*	☐ YES ☐ NO
10.	The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)	
J. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)	
Containers	
11. The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ YES ☐ NO
Drains	
12. The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.J.12 is "NO," go to Question VIII.J.15.*	☐ YES ☐ NO
13. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ YES ☐ NO
14. The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ YES ☐ NO
15. The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an elastomer product process unit. *If the response to Question VIII.J.15 is "NO," go to Section VIII.K.*	☐ YES ☐ NO
16. The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.149(d) and § 63.501(a)(12). *If the response to Question VIII.J.16 is "NO," go to Section VIII.K.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
J. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group 1 Polymers and Resins (continued)		
***Drains* (continued)**		
17.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at any flow rate.	☐ YES ☐ NO
18.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ YES ☐ NO
19.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an elastomer product process unit that is a new affected source or part of a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.482, at an average annual flow rate greater than or equal to 0.02 liter per minute.	☐ YES ☐ NO
K. Subpart W - National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-nylon Polyamides Production		
1.	The manufacture of basic liquid epoxy resins (BLR) and/or manufacture of wet strength resins (WSR) is conducted in the application area. *If the response to Question VIII.K.1 is "NO" or "N/A," go to Section VIII.L.*	☐ YES ☒ NO ☐ N/A
2.	The application area includes a BLR and/or WSR research and development facility.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
L.	**Subpart X - National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting**	
1.	The application area includes one or more of the affected sources in 40 CFR § 63.541(a) that are located at a secondary lead smelter. *If the response to Question VIII.L.1 is "NO" or "N/A," go to Section VIII.M.*	☐ YES ☒ NO ☐ N/A
2.	The application area is using and approved alternate to the requirements of § 63.545(c)(1)-(5) for control of fugitive dust emission sources.	☐ YES ☐ NO
M.	**Subpart Y - National Emission Standards for Marine Tank Vessel Loading Operations**	
1.	The application area includes marine tank vessel loading operations that are specified in 40 CFR § 63.560 and located at an affected source as defined in 40 CFR § 63.561.	☐ YES ☒ NO
N.	**Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries**	
	Applicability	
1.	The application area includes petroleum refining process units and/or related emission points that are specified in 40 CFR § 63.640(c)(1) - (c)(7). *If the response to Question VIII.N.1 is "NO," go to Section VIII.O.*	☐ YES ☒ NO
2.	All petroleum refining process units/and or related emission points within the application area are specified in 40 CFR § 63.640(g)(1) - (g)(7). *If the response to Question VIII.N.2 is "YES," go to Section VIII.O.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
N. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (continued)		
***Applicability* (continued)**		
3.	The application area is located at a plant site that is a major source as defined in the Federal Clean Air Act § 112(a). *If the response to Question VIII.N.3 is "NO," go to Section VIII.O.*	☐ YES ☐ NO
4.	The application area is located at a plant site which emits or has equipment containing/contacting one or more of the HAPs listed in table 1 of 40 CFR Part 63, Subpart CC. *If the response to Question VIII.N.4 is "NO," go to Section VIII.O.*	☐ YES ☐ NO
5.	The application area includes Group 1 wastewater streams that are not conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section.	☐ YES ☐ NO
6.	The application area includes Group 2 wastewater streams that are not conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section.	☐ YES ☐ NO
7.	The application area includes Group 1 or Group 2 wastewater streams that are conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR §§ 63.133 - 63.147 of Subpart G wastewater provisions section. *If the response to Question VIII.N.7 is "NO," go to Section VIII.O.*	☐ YES ☐ NO
8.	The application area includes Group 1 or Group 2 wastewater streams that are complying with 40 CFR § 63.640(o)(2)(i).	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
N. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (continued)		
***Applicability* (continued)**		
9.	The application area includes Group 1 or Group 2 wastewater streams that are complying with 40 CFR § 63.640(o)(2)(ii). *If the response to Question VIII.N.9 is "NO," go to Section VIII.O.*	☐ YES ☐ NO
10.	The application area includes Group 2 wastewater streams or organic streams whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR Part 61, Subpart FF on or after December 31, 1992.	☐ YES ☐ NO
Containers, Drains, and other Appurtenances		
11.	The application area includes containers that are subject to the requirements of 40 CFR § 63.135 as a result of complying with 40 CFR § 63.640(o)(2)(ii).	☐ YES ☐ NO
12.	The application area includes individual drain systems that are subject to the requirements of 40 CFR § 63.136 as a result of complying with 40 CFR § 63.640(o)(2)(ii).	☐ YES ☐ NO
O. Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations		
1.	The application area is located at a plant site receiving material that meets the criteria for off-site material as specified in 40 CFR § 63.680(b)(1). *If the response to Question VIII.O.1 is "NO" or "N/A," go to Section VIII.P*	☐ YES ☒ NO ☐ N/A
2.	Materials specified in 40 CFR § 63.680(b)(2) are received at the application area.	☐ YES ☐ NO
3.	The application area has a waste management operation receiving off-site material and is regulated under 40 CFR Part 264 or Part 265.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
O. Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations (continued)		
4.	The application area has a waste management operation treating wastewater which is an off-site material and is exempted under 40 CFR §§ 264.1(g)(6) or 265.1(c)(10).	☐ YES ☐ NO
5.	The application area has an operation subject to Clean Water Act, § 402 or § 307(b) but is not owned by a "state" or "municipality."	☐ YES ☐ NO
6.	The predominant activity in the application area is the treatment of wastewater received from off-site.	☐ YES ☐ NO
7.	The application area has a recovery operation that recycles or reprocesses hazardous waste which is an off-site material and is exempted under 40 CFR §§ 264.1(g)(2) or 265.1(c)(6).	☐ YES ☐ NO
8.	The application area has a recovery operation that recycles or reprocesses used solvent which is an off-site material and is not part of a chemical, petroleum, or other manufacturing process that is required to use air emission controls by another subpart of 40 CFR Part 63 or Part 61.	☐ YES ☐ NO
9.	The application area has a recovery operation that re-refines or reprocesses used oil which is an off-site material and is regulated under 40 CFR Part 279, Subpart F (Standards for Used Oil Processors and Refiners).	☐ YES ☐ NO
10.	The application area is located at a site where the total annual quantity of HAPs in the off-site material is less than 1 megagram per year. *If the response to Question VIII.O.10 is "YES," go to Section VIII.P.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
O. Subpart DD - National Emission Standards for Off-site Waste and Recovery Operations (continued)		
11.	The application area receives offsite materials with average VOHAP concentration less than 500 ppmw at the point of delivery that are not combined with materials having a VOHAP concentration of 500 ppmw or greater. *If the response to Question VIII.O.11 is "NO," go to Question VIII.O.14.*	☐ YES ☐ NO
12.	VOHAP concentration is determined by direct measurement.	☐ YES ☐ NO
13.	VOHAP concentration is based on knowledge of the off-site material.	☐ YES ☐ NO
14.	The application area includes an equipment component that is a pump, compressor, and agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector or instrumentation system. *If the response to Question VIII.O.14 is "NO," go to Question VIII.O.17.*	☐ YES ☐ NO
15.	An equipment component in the application area contains or contacts off-site material with a HAP concentration greater than or equal to 10% by weight.	☐ YES ☐ NO
16.	An equipment component in the application area is intended to operate 300 hours or more during a 12-month period.	☐ YES ☐ NO
17.	The application area includes containers that manage non-exempt off-site material.	☐ YES ☐ NO
18.	The application area includes individual drain systems that manage non-exempt off-site materials.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)			
	P.	**Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities**	
	1.	The application area includes facilities that manufacture or rework commercial, civil, or military aerospace vehicles or components. *If the response to Question VIII.P.1 is "NO" or "N/A," go to Section VIII.Q.*	☐ YES ☒ NO ☐ N/A
	2.	The application area includes one or more of the affected sources specified in 40 CFR § 63.741(c)(1) - (7).	☐ YES ☐ NO
	Q.	**Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.**	
♦	1.	The application area contains facilities that process, upgrade or store hydrocarbon liquids that are located at oil and natural gas production facilities prior to the point of custody transfer.	☐ YES ☒ NO
♦	2.	The application area contains facilities that process, upgrade or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. *For SOP applications, if the responses to Questions VIII.Q.1 and VIII.Q.2 are both "NO," go to Section VIII.R.* *For GOP applications, if the responses to Questions VIII.Q.1 and VIII.Q.2 are both "NO," go to Section VIII.Z.*	☐ YES ☒ NO
♦	3.	The application area contains only facilities that exclusively process, store or transfer black oil as defined in § 63.761. *For SOP applications, if the response to Question VIII.Q.3 is "YES," go to Section VIII.R.* *For GOP applications, if the response to Question VIII.Q.3 is "YES," go to Section VIII.Z.*	☐ YES ☐ NO
♦	4.	The application area is located at a site that is a major source of HAP. *If the response to Question VIII.Q.4 is "NO," go to Question VIII.Q.6.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)			
	Q.	**Subpart - HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities (continued)**	
♦	5.	The application area contains only a facility, prior to the point of custody transfer, with facility-wide actual annual average natural gas throughput less than 18.4 thousand standard cubic meters (649,789.9 ft^3) per day and a facility-wide actual annual average hydrocarbon liquid throughput less the 39,700 liters (10,487.6 gallons) per day. *For SOP applications, if the response to Question VIII.Q.5 is "YES," go to Section VIII.R.* *For GOP applications, if the response to Question VIII.Q.5 is "YES," go to Section VIII.Z.* *For all applications, if the response to Question VIII.Q.5 is "NO," go to Question VIII.Q.9.*	☐ YES ☐ NO
♦	6.	The application area includes a triethylene glycol (TEG) dehydration unit. *For SOP applications, f the answer to Question VIII.Q.6 is "NO," go to Section VIII.R. For GOP applications, if the response to Question VIII.Q.6 is "NO," go to Section VIII.Z.*	☐ YES ☐ NO
♦	7.	The application area is located at a site that is within the boundaries of UA plus offset or a UC, as defined in 40 CFR § 63.761.	☐ YES ☐ NO
♦	8.	The site has actual emissions of 5 tons per year or more of a single HAP, or 12.5 tons per year or more of a combination of HAP.	☐ YES ☐ NO
♦	9.	Emissions for major source determination are being estimated based on the maximum natural gas or hydrocarbon liquid throughput as calculated in § 63.760(a)(1)(i)-(iii).	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
R.	**Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)**	
1.	The application area includes shipbuilding or ship repair operations. *If the response to Question VIII.R.1 is "NO," go to Section VIII.S.*	☐ YES ☒ NO
2.	Shipbuilding or ship repair operations located in the application area are subject to 40 CFR Part 63, Subpart II.	☐ YES ☐ NO
S.	**Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations**	
1.	The application area includes wood furniture manufacturing operations and/or wood furniture component manufacturing operations. *If the response to Question VIII.S.1 is "NO" or "N/A," go to Section VIII.T.*	☐ YES ☒ NO ☐ N/A
2.	The application area meets the definition of an "incidental wood manufacturer" as defined in 40 CFR § 63.801.	☐ YES ☐ NO
T.	**Subpart KK - National Emission Standards for the Printing and Publishing Industry**	
1.	The application area includes publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses.	☐ YES ☒ NO ☐ N/A
U.	**Subpart PP - National Emission Standards for Containers**	
1.	The application area includes containers for which another 40 CFR Part 60, 61, or 63 subpart references the use of 40 CFR Part 63, Subpart PP for the control of air emissions. *If the response to Question VIII.U.1 is "NO," go to Section VIII.V.*	☐ YES ☒ NO
2.	The application area includes containers using Container Level 1 controls.	☐ YES ☐ NO
3.	The application area includes containers using Container Level 2 controls.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
U. Subpart PP - National Emission Standards for Containers (continued)		
4.	The application area includes containers using Container Level 3 controls.	☐ YES ☐ NO
V. Subpart RR - National Emission Standards for Individual Drain Systems		
1.	The application area includes individual drain systems for which another 40 CFR Part 60, 61, or 63 subpart references the use of 40 CFR Part 63, Subpart RR for the control of air emissions.	☐ YES ☒ NO
W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards		
1.	The application area includes an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process.	☐ YES ☒ NO
2.	The application area includes process wastewater streams generated from an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process. *If the responses to Questions VIII.W.1 and VIII.W.2 are both "NO," go to Question VIII.W.20.*	☐ YES ☒ NO
3.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 under the requirements of 40 CFR § 63.132(c).	☐ YES ☐ NO
4.	The application area includes process wastewater streams that are determined to be Group 2 under the requirements of 40 CFR § 63.132(c).	☐ YES ☐ NO
5.	All Group 1 wastewater streams at the site are determined to have a total source mass flow rate of less than 1 MG/yr.	☐ YES ☐ NO
6.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.W.6 is "NO," go to Question VIII.W.8.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
7.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ YES ☐ NO
8.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ YES ☐ NO
9.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.W.8 and W.9 are both "NO," go to Question VIII.W.11.*	☐ YES ☐ NO
10.	The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ YES ☐ NO
11.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ YES ☐ NO
12.	The application area includes individual drain systems that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.W.12 is "NO," go to Question VIII.W.15.*	☐ YES ☐ NO
13.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of covers and, if vented, closed vent systems and control devices.	☐ YES ☐ NO
14.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ YES ☐ NO

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W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
15.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an acetal resins production process unit; an acrylic and modacrylic fiber production process unit complying with 40 CFR § 63.1103(b)(3)(i); or an existing polycarbonate production process unit. *If the response to Question VIII.W.15 is "NO," go to Question VIII.W.20.*	☐ YES ☐ NO
16.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.1106(c)(1) - (3). *If the response to Question VIII.W.16 is "NO," go to Question VIII.W.20.*	☐ YES ☐ NO
17.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at any flow rate.	☐ YES ☐ NO
18.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ YES ☐ NO

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W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
19.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an acrylic resins or acrylic and modacrylic fiber production process unit that is part of a new affected source or is a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 ppmw of compounds meeting the definition of organic HAP in Table 9 to 40 CFR Part 60, Subpart G, at an average annual flow rate greater than or equal to 0.02 liter per minute.	☐ YES ☐ NO
20.	The application area includes an ethylene production process unit.	☐ YES ☒ NO ☐ N/A
21.	The application area includes waste streams generated from an ethylene production process unit. *If the responses to Questions VIII.W.20 and VIII.W.21 are both "NO" or "N/A," go to Question VIII.W.54.*	☐ YES ☒ NO ☐ N/A
22.	The waste stream(s) contains at least one of the chemicals listed in 40 CFR § 63.1103(e), Table 7(g)(1). *If the response to Question VIII.W.22 is "NO," go to Question VIII.W.54.*	☐ YES ☐ NO
23.	Waste stream(s) are transferred off-site for treatment. *If the response to Question VIII.W.23 is "NO," go to Question VIII.W.25.*	☐ YES ☐ NO
24.	The application area has waste management units that treat or manage waste stream(s) prior to transfer off-site for treatment. *If the response to Question VIII.W.24 is "NO," go to Question VIII.W.54.*	☐ YES ☐ NO

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W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
25.	The total annual benzene quantity from waste at the site is less than 10 Mg/yr as determined according to 40 CFR § 61.342(a).	☐ YES ☐ NO
26.	The application area contains at least one waste stream that is a continuous butadiene waste stream as defined in 40 CFR § 63.1082(b). *If the response to Question VIII.W.26 is "NO," go to Question VIII.W.43.*	☐ YES ☐ NO
27.	The waste stream(s) contains at least 10 ppmw 1, 3-butadiene at a flow rate of 0.02 liters per minute or is designated for control. *If the response to Question VIII.W.27 is "NO," go to Question VIII.W.43.*	☐ YES ☐ NO
28.	The control requirements of 40 CFR Part 63, Subpart G for process wastewater as specified in 40 CFR § 63.1095(a)(2) are selected for control of the waste stream(s). *If the response to Question VIII.W.28 is "NO," go to Question VIII.W.33.*	☐ YES ☐ NO
29.	The application area includes containers that receive, manage, or treat a continuous butadiene waste stream.	☐ YES ☐ NO
30.	The application area includes individual drain systems that receive, manage, or treat a continuous butadiene waste stream. *If the response to Question VIII.W.30 is "NO," go to Question VIII.W.43.*	☐ YES ☐ NO
31.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ YES ☐ NO

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W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
32.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs. *If the response to Question VIII.W.32 is required, go to Question VIII.W.43.*	☐ YES ☐ NO
33.	The application area has containers, as defined in 40 CFR § 61.341, that receive a continuous butadiene waste stream. *If the response to Question VIII.W.33 is "NO," go to Question VIII.W.36.*	☐ YES ☐ NO
34.	The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. *If the response to Question VIII.W.34 is "YES," go to Question VIII.W.36.*	☐ YES ☐ NO
35.	Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	☐ YES ☐ NO
36.	The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage a continuous butadiene waste stream. *If the response to Question VIII.W.36 is "NO," go to Question VIII.W.43.*	☐ YES ☐ NO
37.	The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. *If the response to Question VIII.W.37 is "YES," go to Question VIII.W.43.*	☐ YES ☐ NO

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W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
38.	The application area has individual drain systems complying with 40 CFR § 61.346(a). *If the response to Question VIII.W.38 is "NO," go to Question VIII.W.40.*	☐ YES ☐ NO
39.	Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	☐ YES ☐ NO
40.	The application area has individual drain systems complying with 40 CFR § 61.346(b). *If the response to Question VIII.W.40 is "NO," go to Question VIII.W.43.*	☐ YES ☐ NO
41.	Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	☐ YES ☐ NO
42.	Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	☐ YES ☐ NO
43.	The application area has at least one waste stream that contains benzene. *If the response to Question VIII.W.43 is "NO," go to Question VIII.W.54.*	☐ YES ☐ NO
44.	The application area has containers, as defined in 40 CFR § 61.341, that receive a waste stream containing benzene. *If the response to Question VIII.W.44 is "NO," go to Question VIII.W.47.*	☐ YES ☐ NO
45.	The application area is an alternate means of compliance to meet the 40 CFR § 61.345 requirements for containers. *If the response to Question VIII.W.45 is "YES," go to Question VIII.W.47.*	☐ YES ☐ NO

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W. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)		
46.	Covers and closed-vent systems used for containers operate such that the container is maintained at a pressure less than atmospheric pressure.	☐ YES ☐ NO
47.	The application area has individual drain systems, as defined in 40 CFR § 61.341, that receive or manage a waste stream containing benzene. *If the response to Question VIII.W.47 is "NO," go to Question VIII.W.54.*	☐ YES ☐ NO
48.	The application area is using an alternate means of compliance to meet the 40 CFR § 61.346 requirements for individual drain systems. *If the response to Question VIII.W.48 is "YES," go to Question VIII.W.54.*	☐ YES ☐ NO
49.	The application area has individual drain systems complying with 40 CFR § 61.346(a). *If the response to Question VIII.W.49 is "NO," go to Question VIII.W.51.*	☐ YES ☐ NO
50.	Covers and closed-vent systems used for individual drain systems operate such that the individual drain system is maintained at a pressure less than atmospheric pressure.	☐ YES ☐ NO
51.	The application area has individual drain systems complying with 40 CFR § 61.346(b). *If the response to Question VIII.W.51 is "NO," go to Question VIII.W.54.*	☐ YES ☐ NO
52.	Junction boxes in the individual drain systems are equipped with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
W.	**Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories - Generic Maximum Achievable Control Technology Standards (continued)**	
53.	Junction box vent pipes in the individual drain systems are connected to a closed-vent system and control device.	☐ YES ☐ NO
54.	The application area contains a cyanide chemicals manufacturing process. *If the response to Question VIII.W.54 is "NO," go to Section VIII.X.*	☐ YES ☒ NO
55.	The cyanide chemicals manufacturing process generates maintenance wastewater containing hydrogen cyanide or acetonitrile.	☐ YES ☐ NO
X.	**Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins**	
1.	The application area includes thermoplastic product process units, and/or their associated affected sources specified in 40 CFR § 63.1310(a)(1) - (5), that are subject to 40 CFR Part 63, Subpart JJJ. *If the response to Question VIII.X.1 is "NO," go to Section VIII.Y.*	☐ YES ☒ NO
2.	The application area includes thermoplastic product process units and/or wastewater streams and wastewater operations that are associated with thermoplastic product process units. *If the response to Question VIII.X.2 is "NO," go to Section VIII.Y.*	☐ YES ☐ NO
3.	All process wastewater streams generated or managed in the application area are from sources producing polystyrene. *If the response to Question VIII.X.3 is "YES," go to Section VIII.Y.*	☐ YES ☐ NO
4.	All process wastewater streams generated or managed in the application area are from sources producing ASA/AMSAN. *If the response to Question VIII.X.4 is "YES," go to Section VIII.Y.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)		
5.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for organic HAPs as defined in 40 CFR § 63.1312.	☐ YES ☐ NO
6.	The application area includes process wastewater streams, located at existing sources, that are Group 2 for organic HAPs as defined in 40 CFR § 63.1312.	☐ YES ☐ NO
7.	The application area includes process wastewater streams, located at new sources, that are Group 2 for organic HAPs as defined in 40 CFR § 63.1312.	☐ YES ☐ NO
8.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.X.8 is "YES," go to Question VIII.X.18.*	☐ YES ☐ NO
9.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.X.9 is "NO," go to Question VIII.X.11.*	☐ YES ☐ NO
10.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ YES ☐ NO
11.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ YES ☐ NO
12.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.X.11 - VIII.X.12 are both "NO," go to Question VIII.X.14.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)		
13.	The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ YES ☐ NO
Containers		
14.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ YES ☐ NO
Drains		
15.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.X.15 is "NO," go to Question VIII.X.18.*	☐ YES ☐ NO
16.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ YES ☐ NO
17.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ YES ☐ NO
18.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of an thermoplastic product process unit. *If the response to Question VIII.X.18 is "NO," go to Section VIII.Y.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
X. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (continued)		
***Drains* (continued)**		
19.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that meet the criteria listed in 40 CFR § 63.149(d) and § 63.1330(b)(12). *If the response to Question VIII.X.19 is "NO," go to Section VIII.Y.*	☐ YES ☐ NO
20.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration greater than or equal to 10,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at any flow rate.	☐ YES ☐ NO
21.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration greater than or equal to 1,000 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at an annual average flow rate greater than or equal to 10 liters per minute.	☐ YES ☐ NO
22.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of an thermoplastic product process unit that is a new affected source or part of a new affected source and the equipment conveys water with a total annual average concentration greater than or equal to 10 parts per million by weight of compounds meeting the definition of organic HAP in 40 CFR § 63.1312, at an average annual flow rate greater than or equal to 0.02 liter per minute	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
Y.	**Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic reforming Units, and Sulfur Recovery Units.**	
1.	The application area is subject to 40 CFR Part 63, Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic reforming Units, and Sulfur Recovery Units.	☐ YES ☒ NO
Z.	**Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste (MSW) Landfills.**	
♦ 1.	The application area is subject to 40 CFR Part 63, Subpart AAAA - National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills.	☐ YES ☒ NO
AA.	**Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON)**	
1.	The application area is located at a site that includes process units that manufacture as a primary product one or more of the chemicals listed in 40 CFR § 63.2435(b)(1).	☒ YES ☐ NO
2.	The application area is located at a plant site that is a major source as defined in FCAA § 112(a).	☐ YES ☒ NO
3.	The application area is located at a site that includes miscellaneous chemical manufacturing process units (MCPU) that process, use or generate one or more of the organic hazardous air pollutants listed in § 112(b) of the Clean Air Act or hydrogen halide and halogen HAP. *If the response to Question VIII.AA.1, AA.2 or AA.3 is "NO," go to Section VIII.BB.*	☒ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)		
4.	The application area includes process vents, storage vessels, transfer racks, or waste streams associated with a miscellaneous chemical manufacturing process subject to 40 CFR 63, Subpart FFFF. *If the response to Question VIII.AA.4 is "NO," go to Section VIII.BB.*	☐ YES ☐ NO
5.	The application area includes process wastewater streams. *If the response to Question VIII.AA.5 is "NO," go to Question VIII.AA.18.*	☐ YES ☐ NO
6.	The application area includes process wastewater streams that are designated as Group 1 or are determined to be Group 1 for compounds listed in Table 8 of 40 CFR Part 63, Subpart G or Table 8 and Table 9, as appropriate, of 40 CFR Part 63, Subpart FFFF.	☐ YES ☐ NO
7.	The application area includes process wastewater streams that are Group 2 for compounds listed in Table 8 or Table 8 and Table 9, as appropriate, of 40 CFR Part 63, Subpart FFFF.	☐ YES ☐ NO
8.	All Group 1 wastewater streams at the site are demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.AA.8 is "YES," go to Section VIII.BB.*	☐ YES ☐ NO
9.	The site has untreated and/or partially treated Group 1 wastewater streams demonstrated to have a total source mass flow rate of less than 1 MG/yr. *If the response to Question VIII.AA.9 is "NO," go to Question VIII.AA.11.*	☐ YES ☐ NO
10.	The application area includes waste management units that receive or manage a partially treated Group 1 wastewater stream prior to or during treatment.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)		
11.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an on-site treatment operation that is not owned or operated by the owner or operator of the source generating the waste stream or residual.	☐ YES ☐ NO
12.	Group 1 wastewater streams or residual removed from Group 1 wastewater streams are transferred to an off-site treatment operation. *If the responses to Questions VIII.AA.11 and VIII.AA.12 are both "NO," go to Question VIII.AA.18.*	☐ YES ☐ NO
13.	Group 1 wastewater streams are transferred to an offsite treatment facility meeting the requirements of 40 CFR § 63.138(h). *If the response to Question VIII.AA.13 is "NO," go to Question VIII.AA.15.*	☐ YES ☐ NO
14.	The option to document in the notification of compliance status report that the wastewater will be treated in a facility meeting the requirements of 40 CFR § 63.138(h) is elected.	☐ YES ☐ NO
15.	Group 1 wastewater streams or residuals with a total annual average concentration of compounds in Table 8 of 40 CFR Part 63, Subpart FFFF less than 50 ppmw are transferred offsite. *If the response to Question VIII.AA.15 is "NO," go to Question VIII.AA.17.*	☐ YES ☐ NO
16.	The transferor is demonstrating that less than 5 percent of the HAP in Table 9 of 40 CFR Part 63, Subpart FFFF is emitted from waste management units up to the activated sludge unit.	☐ YES ☐ NO
17.	The application area includes waste management units that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream prior to shipment or transport.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)		
18.	The application area includes containers that receive, manage, or treat a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream.	☐ YES ☐ NO
19.	The application area includes individual drain systems that receive or manage a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream. *If the response to Question VIII.AA.19 is "NO," go to Question VIII.AA.22.*	☐ YES ☐ NO
20.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of cover and, if vented, closed vent systems and control devices.	☐ YES ☐ NO
21.	The application area includes individual drain systems that are complying with 40 CFR § 63.136 through the use of water seals or tightly fitting caps or plugs.	☐ YES ☐ NO
22.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that are part of a chemical manufacturing process unit that meets the criteria of 40 CFR § 63.100(b). *If the response to Question VIII.AA.22 is "NO," go to Section VIII.BB.*	☐ YES ☐ NO
23.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes (that are part of a miscellaneous chemical manufacturing process unit) that meet the criteria listed in 40 CFR § 63.149(d). *If the response to Question VIII.AA.23 is "NO," go to Section VIII.BB.*	☐ YES ☐ NO
24.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that convey water with a total annual average concentration of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 10,000 ppmw at any flow rate, and the total annual load of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 200 lb/yr.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
AA. Subpart FFFF - National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Production and Processes (MON) (continued)		
25.	The application area includes drains, drain hubs, manholes, lift stations, trenches, or pipes that convey water with a total annual average concentration of compounds in table 8 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 1,000 ppmw, and the annual average flow rate is greater than or equal to 1 liter per minute.	☐ YES ☐ NO
26.	The application area includes drains, drain hubs, manholes, lift stations, trenches or pipes that are part of a chemical manufacturing process unit that is subject to the new source requirements of 40 CFR § 63.2445(a); and the equipment conveys water with a combined total annual average concentration of compounds in tables 8 and 9 of 40 CFR Part 63, Subpart FFFF is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in tables 8 and 9 to this subpart is greater than or equal to 1 tpy.	☐ YES ☐ NO
BB. Subpart GGGG - National Emission Standards for Hazardous Air Pollutants for: Solvent Extractions for Vegetable Oil Production.		
1.	The application area includes a vegetable oil production process that: is by itself a major source of HAP emissions or, is collocated within a plant site with other sources that are individually or collectively a major source of HAP emissions.	☐ YES ☒ NO
CC. Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation		
1.	The application area includes a facility at which a site remediation is conducted. *If the answer to Question VIII.CC.1 is "NO," go to Section VIII.DD.*	☐ YES ☒ NO
2.	The application area is located at a site that is a major source of HAP. *If the answer to Question VIII.CC.2 is "NO," go to Section VIII.DD.*	☐ YES ☐ NO
3.	All site remediation's qualify for one of the exemptions contained in 40 CFR § 63.7881(b)(1) through (6). *If the answer to Question VIII.CC.3 is "YES," go to Section VIII.DD.*	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
CC. Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation (continued)		
4.	Prior to beginning site remediation activities it was determined that the total quantity of HAP listed in Table 1 of Subpart GGGGG that will be removed during all site remediations will be less than 1 Mg/yr. *If the answer to Question VIII.CC.4 is "YES," go to Section VIII.DD.*	☐ YES ☐ NO
5.	The site remediation will be completed within 30 consecutive calendar days.	☐ YES ☐ NO
6.	No site remediation will exceed 30 consecutive calendar days. *If the answer to Question VIII.CC.6 is "YES," go to Section VIII.DD.*	☐ YES ☐ NO
7.	Site remediation materials subject to 40 CFR Part 63, Subpart GGGGG are transferred from the application area to an off-site facility.	☐ YES ☐ NO
8.	All site remediation materials subject to 40 CFR Part 63, Subpart GGGGG are transferred from the application area to an off-site facility. *If the answer to Question VIII.CC.8 is "YES," go to Section VIII.DD.*	☐ YES ☐ NO
9.	The application area includes containers that manage site remediation materials subject to 40 CFR Part 63, Subpart GGGGG. *If the response to Question VIII.CC.9 is "NO," go to Question VIII.CC.14.*	☐ YES ☐ NO
10.	The application area includes containers using Container Level 1 controls as specified in 40 CFR § 63.922(b).	☐ YES ☐ NO
11.	The application area includes containers with a capacity greater than 0.46 m^3 that meet the requirements of 40 CFR § 63.7900(b)(3)(i) and (ii).	☐ YES ☐ NO
12.	The application area includes containers using Container Level 2 controls as specified in 40 CFR § 63.923(b).	☐ YES ☐ NO
13.	The application area includes containers using Container Level 3 controls as specified in 40 CFR § 63.924(b).	☐ YES ☐ NO
14.	The application area includes individual drain systems complying with the requirements of 40 CFR § 63.962.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)		
DD. Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities		
1.	The application area is located at a site that is an area source of hazardous air pollutants. *If the answer to Question DD.1 is "NO," go to Section VIII.FF.*	☒ YES ☐ NO
2.	The application area includes a pipeline breakout station, as defined in 40 CFR Part 63, Subpart BBBBBB, not subject to the control requirements of 40 CFR Part 63, Subpart R.	☐ YES ☒ NO
3.	The application area includes a pipeline pumping station as defined in 40 CFR Part 63, Subpart BBBBBB.	☐ YES ☒ NO
4.	The application area includes a bulk gasoline plant as defined in 40 CFR Part 63, Subpart BBBBBB. *If the answer to Question VIII.DD.4 is "NO," go to Question VIII.DD.6.*	☐ YES ☒ NO
5.	The bulk gasoline plant was operating, prior to January 10, 2010, in compliance with an enforceable State, local or tribal rule or permit that requires submerged fill as specified in 40 CFR § 63.11086(a).	☐ YES ☐ NO
6.	The application area includes a bulk gasoline terminal, as defined in 40 CFR Part 63, Subpart BBBBBB, not subject to the control requirements of 40 CFR Part 63, Subpart R or Subpart CC. *If the answer to Question VIII.DD.6 is "NO," go to Section VIII.EE.*	☐ YES ☒ NO
7.	The bulk gasoline terminal has a throughput of less than 250,000 gallons per day. *If the answer to Question VIII.DD.7 is "YES," go to Section VIII.EE.*	☐ YES ☐ NO
8.	The bulk gasoline terminal loads gasoline into gasoline cargo tanks other than railcar cargo tanks.	☐ YES ☐ NO
9.	The bulk gasoline terminal loads gasoline into railcar cargo tanks. *If the answer to Question VIII.DD.9 is "NO," go to Section VIII.EE.*	☐ YES ☐ NO
10.	The bulk gasoline terminal loads gasoline into railcar cargo tanks which do not collect vapors from a vapor balance system.	☐ YES ☐ NO
11.	The bulk gasoline terminal loads gasoline into railcar cargo tanks which collect vapors from a vapor balance system and that system complies with a Federal, State, local, tribal rule or permit.	☐ YES ☐ NO

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VIII. Title 40 Code of Federal Regulations Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories (continued)			
	EE. Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities		
♦	1.	The application area is located at a site that is an area source of hazardous air pollutants.	☒ YES ☐ NO
	2.	The application area includes at least one gasoline dispensing facility as defined in 40 CFR § 63.11132. *If the answer to Question VIII.EE.2 is "NO," go to Section VIII.FF.*	☒ YES ☐ NO
	3.	The application area includes at least one gasoline dispensing facility with a monthly throughput of less than 10,000 gallons.	☒ YES ☐ NO
	4.	The application area includes at least one gasoline dispensing facility where gasoline is dispensed from a fixed gasoline storage tank into a portable gasoline tank for the on-site delivery and subsequent dispensing into other gasoline-fueled equipment.	☒ YES ☐ NO
	FF. Recently Promulgated 40 CFR Part 63 Subparts		
♦	1.	The application area is subject to one or more promulgated 40 CFR Part 63 subparts not addressed on this form. *If the response to Question VIII.EE.1 is "NO," go to Section IX. A list of promulgated 40 CFR Part 63 subparts not otherwise addressed on OP-REQ1 is included in the instructions*	☐ YES ☒ NO
♦	2.	Provide the Subpart designation (i.e. Subpart EEE) in the space provided below.	
IX. Title 40 Code of Federal Regulations Part 68 (40 CFR Part 68) - Chemical Accident Prevention Provisions			
	A. Applicability		
♦	1.	The application area contains processes subject to 40 CFR Part 68, Chemical Accident Prevention Provisions, and specified in 40 CFR § 68.10.	☒ YES ☐ NO

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X.	**Title 40 Code of Federal Regulations Part 82 (40 CFR Part 82) - Protection of Stratospheric Ozone**		
	A.	**Subpart A - Production and Consumption Controls**	
♦	1.	The application area is located at a site that produces, transforms, destroys, imports, or exports a controlled substance or product.	☐ YES ☒ NO ☐ N/A
	B.	**Subpart B - Servicing of Motor Vehicle Air Conditioners**	
♦	1.	Servicing, maintenance, and/or repair of fleet vehicle air conditioning systems using ozone-depleting refrigerants is conducted in the application area.	☐ YES ☒ NO
	C.	**Subpart C - Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances**	
♦	1.	The application area sells or distributes one or more nonessential products (which release a Class I or Class II substance) that are subject to 40 CFR Part 82, Subpart C.	☐ YES ☒ NO ☐ N/A
	D.	**Subpart D - Federal Procurement**	
♦	1.	The application area is owned/operated by a department, agency, or instrumentality of the United States.	☐ YES ☒ NO ☐ N/A
	E.	**Subpart E - The Labeling of Products Using Ozone Depleting Substances**	
♦	1.	The application area includes containers in which a Class I or Class II substance is stored or transported prior to the sale of the Class I or Class II substance to the ultimate consumer.	☐ YES ☒ NO ☐ N/A
♦	2.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products containing a Class I or Class II substance.	☐ YES ☒ NO ☐ N/A
♦	3.	The application area is a manufacturer, importer, wholesaler, distributor, or retailer of products manufactured with a process that uses a Class I or Class II substance.	☐ YES ☒ NO ☐ N/A

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X.	**Title 40 Code of Federal Regulations Part 82 (40 CFR Part 82) - Protection of Stratospheric Ozone (continued)**		
	F.	**Subpart F - Recycling and Emissions Reduction**	
♦	1.	Servicing, maintenance, and/or repair on refrigeration and non-motor vehicle air condition appliances using ozone-depleting refrigerants or non-exempt substitutes is conducted in the application area.	☒ YES ☐ NO
♦	2.	Disposal of appliances (including motor vehicle air conditioners) or refrigerant or non-exempt substitute reclamation occurs in the application area.	☐ YES ☒ NO ☐ N/A
♦	3.	The application area manufactures appliances or refrigerant recycling and recovery equipment.	☐ YES ☒NO ☐ N/A
	G.	**Subpart G - Significant New Alternatives Policy Program**	
♦	1.	The application area manufactures, formulates, or creates chemicals, product substitutes, or alternative manufacturing processes that are intended for use as a replacement for a Class I or Class II compound. *If the response to Question X.G.1 is "NO," go to Section X.H.*	☐ YES ☒ NO ☐ N/A
♦	2.	All substitutes produced by the application area meet one or more of the exemptions in 40 CFR § 82.176(b)(1) - (7).	☐ YES ☐ NO ☐ N/A
	H.	**Subpart H -Halon Emissions Reduction**	
♦	1.	Testing, servicing, maintaining, repairing, or disposing of equipment containing halons is conducted in the application area.	☐ YES ☐ NO ☐ N/A
♦	2.	Disposal of halons or manufacturing of halon blends is conducted in the application area.	☐ YES ☐ NO ☐ N/A
XI.	**Miscellaneous**		
	A.	**Requirements Reference Tables (RRT) and Flowcharts**	
	1.	The application area contains units that are potentially subject to a regulation for which the TCEQ has not developed an RRT and flowchart.	☐ YES ☒ NO

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XI.	**Miscellaneous (continued)**		
	B.	**Forms**	
♦	1.	The application area contains units that are potentially subject to a regulation for which the TCEQ has not developed a unit attribute form. *If the response to Question XI.B.1 is "NO" or "N/A," go to Section XI.C.*	☐ YES ☒ NO ☐ N/A
♦	2.	Provide the Part and Subpart designation for the federal rule(s) or the Chapter, Subchapter, and Division designation for the State regulation(s) in the space provided below.	
	C.	**Emission Limitation Certifications**	
♦	1.	The application area includes units for which federally enforceable emission limitations have been established by certification.	☒ YES ☐ NO
	D.	**Alternative Means of Control, Alternative Emission Limitation or Standard, or Equivalent Requirements**	
	1.	The application area is located at a site that is subject to a site specific requirement of the state implementation plan (SIP).	☐ YES ☒ NO
	2.	The application area includes units located at the site that are subject to a site specific requirement of the SIP.	☐ YES ☒ NO
	3.	The application area includes units which demonstrate compliance by using an alternative means of control, alternative emission limitation or standard or equivalent requirements approved by the EPA Administrator. *If the response to QuestionXI.D.3 is "YES," please include a copy of the approval document with the application.*	☐ YES ☒ NO
	4.	The application area includes units which demonstrate compliance by using an alternative means of control, alternative emission limitation or standard or equivalent requirements approved by the TCEQ Executive Director. *If the response to QuestionXI.D.3 is "YES," please include a copy of the approval document with the application.*	☐ YES ☒ NO

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XI. Miscellaneous (continued)		
E. Title IV - Acid Rain Program		
1.	The application area includes emission units subject to the Acid Rain Program (ARP), including the Opt-In Program.	☐ YES ☒ NO
2.	The application area includes emission units qualifying for the new unit exemption under 40 CFR § 72.7.	☐ YES ☒ NO
3.	The application area includes emission units qualifying for the retired unit exemption under 40 CFR § 72.8.	☐ YES ☒ NO
F. Cross-State Air Pollution Rule (CSAPR)		
1.	The application area includes emission units subject to the requirements of the Cross-State Air Pollution Rule Trading Program. *If the response to Question XI.F.1 is "NO," go to Section XI.G.*	☐ YES ☒ NO
2.	The application area includes units that are complying with the CEMS requirements of 40 CFR Part 75, Subpart B and Subpart H for SO_2, NO_X, and heat input.	☐ YES ☐ NO
3.	The application area includes gas or oil-fired units that are complying with the CEMS requirements of 40 CFR Part 75, Subpart H for NO_X, and the monitoring requirements of 40 CFR Part 75, Appendix D for SO_2 and heat input.	☐ YES ☐ NO
4.	The application area includes gas or oil-fired peaking units that are complying with the monitoring requirements of 40 CFR Part 75, Appendix E for NO_X, and the monitoring requirements of 40 CFR Part 75,Appendix D for SO_2 and heat input.	☐ YES ☐ NO
5.	The application area includes gas or oil-fired units that are complying with the Low Mass Emissions monitoring requirements of 40 CFR § 75.19 for SO_2, NO_X, and heat input.	☐ YES ☐ NO
6.	The application area includes units that are complying with EPA-approved alternative monitoring system requirements of 40 CFR Part 75, Subpart E for SO_2, NO_X, and heat input.	☐ YES ☐ NO
7.	The application area includes emission units that qualify for a CSAPR retired unit exemption.	☐ YES ☐ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

XI.	**Miscellaneous (continued)**		
	G.	**Permit Shield (SOP Applicants Only)**	
	1.	A permit shield for negative applicability entries on Form OP-REQ2 (Negative Applicable Requirement Determinations) is being requested or already exists in the permit.	☒ YES ☐ NO
	H.	**GOP Type (Complete this section for GOP applications only)**	
♦	1.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 511 - Oil and Gas General Operating Permit for Brazoria, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Orange, Parker, Rockwall, Tarrant, Waller, and Wise Counties.	☐ YES ☐ NO
♦	2.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 512 - Oil and Gas General Operating Permit for Gregg, Nueces, and Victoria Counties.	☐ YES ☐ NO
♦	3.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 513 - Oil and Gas General Operating Permit for Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties.	☐ YES ☐ NO
♦	4.	The application area is applying for initial issuance, revision, or renewal of an oil and gas general operating permit under GOP No. 514 - Oil and Gas General Operating Permit for All Texas Counties Except Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Ellis, Fort Bend, Galveston, Gregg, Hardin, Harris, Jefferson, Johnson, Kaufman, Liberty, Matagorda, Montgomery, Nueces, Orange, Parker, Rockwall, San Patricio, Tarrant, Travis, Victoria, Waller, and Wise County.	☐ YES ☐ NO
♦	5.	The application area is applying for initial issuance, revision, or renewal of a solid waste landfill general operating permit under GOP No. 517 - Municipal Solid Waste Landfill general operating permit.	☐ YES ☐ NO
	I.	**Title 30 TAC Chapter 101, Subchapter H**	
♦	1.	The application area is located in a nonattainment area. *If the response to Question XI.I.1 is "NO," go to question XI.I.3.*	☒ YES ☐ NO
♦	2.	The applicant has or will generate emission reductions to be credited in the TCEQ Emissions Banking and Trading Program.	☒ YES ☐ NO ☐ N/A

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

XI.	**Miscellaneous (continued)**		
	I.	**Title 30 TAC Chapter 101, Subchapter H (continued)**	
♦	3.	The applicant has or will generate discrete emission reductions to be credited in the TCEQ Emissions Banking and Trading Program.	☐ YES ☒ NO ☐ N/A
♦	4.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area where the facilities have a collective uncontrolled design capacity to emit 10 tpy or more of NO_X.	☒ YES ☐ NO
♦	5.	The application area includes an electric generating facility permitted under 30 TAC Chapter 116, Subchapter I.	☐ YES ☒ NO
♦	6.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area and the site has a potential to emit more than 10 tpy of highly-reactive volatile organic compounds (HRVOC) from facilities covered under 30 TAC Chapter 115, Subchapter H, Divisions 1 and 2.	☐ YES ☒ NO
♦	7.	The application area is located at a site in the Houston/Galveston/Brazoria nonattainment area, the site has a potential to emit 10 tpy or less of HRVOC from covered facilities and the applicant is opting to comply with the requirements of 30 TAC Chapter 101, Subchapter H, Division 6, Highly Reactive VOC Emissions Cap and Trade Program.	☐ YES ☒ NO
	J.	**Periodic Monitoring**	
♦	1.	The applicant or permit holder is submitting at least one periodic monitoring proposal described on Form OP-MON in this application.	☐ YES ☒ NO
♦	2.	The permit currently contains at least one periodic monitoring requirement. *If the responses to Questions XI.J.1 and XI.J.2 are both "NO," go to Section XI.K.*	☐ YES ☒ NO
♦	3.	All periodic monitoring requirements are being removed from the permit with this application.	☐ YES ☐ NO
	K.	**Compliance Assurance Monitoring**	
♦	1.	The application area includes at least one unit that does not meet the CAM exemptions in 40 CFR § 64.2(b) for all applicable requirements that it is subject to, and the unit has a pre-control device potential to emit greater than or equal to the amount in tons per year required in a site classified as a major source. *If the response to Question XI.K.1 is "NO," go to Section XI.L.*	☒ YES ☐ NO

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For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

XI.	**Miscellaneous (continued)**		
	K.	**Compliance Assurance Monitoring (continued)**	
♦	2.	The unit or units defined by XI.K.1 are using a control device to comply with an applicable requirement. *If the response to Question XI.K.2 is "NO," go to Section XI.L.*	☐ YES ☐ NO
♦	3.	The permit holder has submitted a CAM proposal on Form OP-MON in a previous application.	☒ YES ☐ NO
♦	4.	The owner/operator or permit holder is submitting a CAM proposal on Form OP-MON according to the deadlines for submittals in 40 CFR § 64.5 in this application. *If the responses to Questions XI.K.3 and XI.K.4 are both "NO," go to Section XI.L.*	☐ YES ☒ NO
	5.	The owner/operator or permit holder is submitting a CAM implementation plan and schedule to be incorporated as enforceable conditions in the permit.	☐ YES ☒ NO
	6.	Provide the unit identification numbers for the units for which the applicant is submitting a CAM implementation plan and schedule in the space below.	
♦	7.	At least one unit defined by XI.K.1 and XI.K.2 is using a CEMS, COMS or PEMS meeting the requirements of 40 CFR § 64.3(d)(2).	☒ YES ☐ NO
♦	8.	All units defined by XI.K.1 and XI.K.2 are using a CEMS, COMS or PEMS meeting the requirements of 40 CFR § 64.3(d)(2). *If the response to Question XI.K.8 is "YES," go to Section XI.L.*	☒ YES ☐ NO
♦	9.	The CAM proposal as described by question XI.K.3 or XI.K.4 addresses particulate matter or opacity.	☐ YES ☐ NO
♦	10.	The CAM proposal as described by question XI.K.3 or XI.K.4 addresses VOC.	☐ YES ☐ NO
♦	11.	The control device in the CAM proposal as described by question XI.K.3 or XI.K.4 has a bypass.	☐ YES ☐ NO
	L.	**Title 30 TAC Chapter 113, Subchapter D, Division 5 - Emission Guidelines and Compliance Times**	
♦	1.	The application area includes at least one air curtain incinerator that commenced construction on or before December 9, 2004. *If the response to Question XI.L.1 is "NO," or "N/A," go to Section XII.*	☐ YES ☒ NO

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For SOP applications, answer ALL questions unless otherwise directed.
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	L.	**Title 30 TAC Chapter 113, Subchapter D, Division 5 - Emission Guidelines and Compliance Times**	
♦	2.	All air curtain incinerators constructed on or before December 9, 2004 combust only wood waste, clean lumber, or yard waste or a mixture of these materials.	☐ YES ☐ NO
XII.	**New Source Review (NSR) Authorizations**		
	A.	**Waste Permits with Air Addendum**	
♦	1.	The application area includes a Municipal Solid Waste Permit or an Industrial Hazardous Waste with an Air Addendum. *If the response to XII.A.1 is "YES," include the waste permit numbers and issuance date in Section XII.J.*	☐ YES ☒ NO
	B.	**Air Quality Standard Permits**	
♦	1.	The application area includes at least one Air Quality Standard Permit NSR authorization. *If the response to XII.B.1 is "NO," go to Section XII.C. If the response to XII.B.1 is "YES," be sure to include the standard permit's registration numbers in Section XII.H, and answer XII.B.2 - B.16 as appropriate.*	☒ YES ☐ NO
♦	2.	The application area includes at least one "State Pollution Control Project" Air Quality Standard Permit NSR authorization under 30 TAC § 116.617.	☐ YES ☒ NO
♦	3.	The application area includes at least one non-rule Air Quality Standard Permit for Pollution Control Projects NSR authorization.	☒ YES ☐ NO
♦	4.	The application area includes at least one "Installation and/or Modification of Oil and Gas Facilities" Air Quality Standard Permit NSR authorization under 30 TAC § 116.620.	☐ YES ☒ NO
♦	5.	The application area includes at least one non-rule Air Quality Standard Permit for Oil and Gas Handling and Production Facilities NSR authorization.	☐ YES ☒ NO
♦	6.	The application area includes at least one "Municipal Solid Waste Landfill" Air Quality Standard Permit NSR authorization under 30 TAC § 116.621.	☐ YES ☒ NO
♦	7.	The application area includes at least one "Municipal Solid Waste Landfill Facilities and Transfer Stations" Standard Permit authorization under 30 TAC Chapter 330, Subchapter U.	☐ YES ☒ NO
	8.	The application area includes at least one "Concrete Batch Plant" Air Quality Standard Permit NSR authorization.	☐ YES ☒ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
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XII. New Source Review (NSR) Authorizations (continued)			
	B. Air Quality Standard Permits (continued)		
♦	9.	The application area includes at least one "Concrete Batch Plant with Enhanced Controls" Air Quality Standard Permit NSR authorization.	☐ YES ☒ NO
♦	10.	The application area includes at least one "Hot Mix Asphalt Plant" Air Quality Standard Permit NSR authorization.	☐ YES ☒ NO
♦	11.	The application area includes at least one "Rock Crusher" Air Quality Standard Permit NSR authorization.	☐ YES ☒ NO
♦	12.	The application area includes at least one "Electric Generating Unit" Air Quality Standard Permit NSR authorization. *If the response to XII.B.12 is "NO," go to Question XII.B.15.*	☐ YES ☒ NO
♦	13.	For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the East Texas Region.	☐ YES ☐ NO
♦	14.	For purposes of "Electric Generating Unit" Air Quality Standard Permit, the application area is located in the West Texas Region.	☐ YES ☐ NO
♦	15.	The application area includes at least one "Boiler" Air Quality Standard Permit NSR authorization.	☐ YES ☒ NO
♦	16.	The application area includes at least one "Sawmill" Air Quality Standard Permit NSR authorization.	☐ YES ☒ NO
	C. Flexible Permits		
	1.	The application area includes at least one Flexible Permit NSR authorization.	☐ YES ☒ NO
	D. Multiple Plant Permits		
	1.	The application area includes at least one Multi-Plant Permit NSR authorization.	☐ YES ☒ NO

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
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XII. NSR Authorizations (Attach additional sheets if necessary for sections E-J)		
♦ **E. PSD Permits and PSD Major Pollutants**		
PSD Permit No.:	Issuance Date:	Pollutant(s):
PSD Permit No.:	Issuance Date:	Pollutant(s):
PSD Permit No.:	Issuance Date:	Pollutant(s):
PSD Permit No.:	Issuance Date:	Pollutant(s):
If PSD Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html.		
♦ **F. Nonattainment (NA) Permits and NA Major Pollutants**		
NA Permit No.:	Issuance Date:	Pollutant(s):
NA Permit No.:	Issuance Date:	Pollutant(s):
NA Permit No.:	Issuance Date:	Pollutant(s):
NA Permit No.:	Issuance Date:	Pollutant(s):
If NA Permits are held for the application area, please complete the Major NSR Summary Table located under the Technical Forms heading at: www.tceq.texas.gov/permitting/air/titlev/site/site_experts.html.		

♦ **G. NSR Authorizations with FCAA § 112(g) Requirements**			
NSR Permit No.: 5260B	Issuance Date:	NSR Permit No.:	Issuance Date:
NSR Permit No.: 18742	Issuance Date:	NSR Permit No.:	Issuance Date:
NSR Permit No.:	Issuance Date:	NSR Permit No.:	Issuance Date:
NSR Permit No.:	Issuance Date:	NSR Permit No.:	Issuance Date:
♦ **H. Title 30 TAC Chapter 116 Permits, Special Permits, Standard Permits, Other Authorizations (Other Than Permits By Rule, PSD Permits, NA Permits) for the Application Area**			
Authorization No.: 136905	Issuance Date: 12/23/2015	Authorization No.:	Issuance Date:
Authorization No.: 137242	Issuance Date: 01/04/2016	Authorization No.:	Issuance Date:
Authorization No.: 147395	Issuance Date: 07/11/2016	Authorization No.:	Issuance Date:
Authorization No.:	Issuance Date:	Authorization No.:	Issuance Date:

Date: 12/06/2017	RN No.: RN100212620	Permit No.: O-1400
Area Name: Methanol and Acetic Acid Units	Customer Reference No.: 600126288	

For SOP applications, answer ALL questions unless otherwise directed.
♦ *For GOP applications, answer ONLY these questions unless otherwise directed.*

XII. NSR Authorizations (Attach additional sheets if necessary for sections E-J)	
♦ **I. Permits by Rule (30 TAC Chapter 106) for the Application Area**	
A list of selected Permits by Rule (previously referred to as standard exemptions) that are required to be listed in the FOP application is available in the instructions.	
PBR No.: 061	Version No./Date: 09/12/1989
PBR No.: 106.261	Version No./Date: 11/01/2003
PBR No.: 106.262	Version No./Date: 11/01/2003
PBR No.: 106.263	Version No./Date: 11/01/2001
PBR No.: 106.371	Version No./Date: 09/04/2000
PBR No.: 106.472	Version No./Date: 09/04/2000
PBR No.: 106.478	Version No./Date: 09/04/2000
PBR No.: 106.532	Version No./Date: 09/04/2000
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
PBR No.:	Version No./Date:
♦ **J. Municipal Solid Waste and Industrial Hazardous Waste Permits With an Air Addendum**	
Permit No.:	Issuance Date:
Permit No.:	Issuance Date:
Permit No.:	Issuance Date:
Permit No.:	Issuance Date:

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Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program
Table 1a: Additions

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
1	50T508-4	OP-UA3	R5111-1	VOC	30 TAC Chapter 115, Subchapter B, Division 1, Storage of VOCs	§115.111(a)(1)
1	50T508-4	OP-UA3	60Kb	VOC	40 CFR Part 60, Subpart Kb	§60.110b(a)
2	50D209	OP-UA15 OP-UA17	R5121-1	VOC	30 TAC Chapter 115, Subchapter B, Division 2, Vent Gas Control	§115.127(a)(4) §115.127(a)(4)(D)
2	50D209	OP-UA15 OP-UA17	60NNN	VOC	40 CFR Part 60, Subpart NNN	§60.660(c) §60.662(c)
3	50EG-501	OP-UA2	R7300	Exempt	30 TAC Chapter 117, Subchapter B	[G]§117.303(a)(11) [G]§117.310(f)

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Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program
Table 1a: Additions

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
3	50EG-501	OP-UA2	60III	NMHC+NOx	40 CFR Part 60, Subpart IIII	NMHC+NOx Limit 4.0 g/kW-hr §60.4205(b) §60.4206 §60.4207(b) [G]§60.4211(a) §60.4211(c) [G]§60.4211(f) §60.4218 §89.112(a)
3	50EG-501	OP-UA2	60III	CO	40 CFR Part 60, Subpart IIII	CO Limit 3.5 g/kW-hr §60.4205(b) §60.4206 §60.4207(b) [G]§60.4211(a) §60.4211(c) [G]§60.4211(f) §60.4218 §89.112(a)

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Applicable Requirements Summary
Form OP-REQ3 (Page 1)
Federal Operating Permit Program

Table 1a: Additions

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
3	50EG-501	OP-UA2	60III	PM	40 CFR Part 60, Subpart IIII	PM Limit 0.2 g/kW-hr §60.4205(b) §60.4206 §60.4207(b) [G]§60.4211(a) §60.4211(c) [G]§60.4211(f) §60.4218 §89.112(a)

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Applicable Requirements Summary
Form OP-REQ3 (Page 2)
Federal Operating Permit Program
Table 1b: Additions

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
1	50T508-4	R5111-1	VOC	[G]§115.117	§115.118(a)(1) §115.118(a)(5) §115.118(a)(6)(A) §115.118(a)(7)	None
1	50T508-4	60Kb	VOC	§60.116b(a) §60.116b(b) §60.116b(c) §60.116b(d) §60.116b(e) §60.116b(e)(1) [G]§60.116b(e)(3)	§60.116b(a) §60.116b(b) §60.116b(c)	§60.116b(d)
2	50D209	R5121-1	VOC	None	None	None
2	50D209	60Kb	VOC	[G]§60.664(e) §60.664(f) §60.664(g) §60.664(g)(1) §60.664(g)(2)	[G]§60.665(h) §60.665(p)	§60.664(g)(1) §60.665(l) §60.665(l)(7) §60.665(p)

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Applicable Requirements Summary
Form OP-REQ3 (Page 2)
Federal Operating Permit Program
Table 1b: Additions

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Revision No.	Unit/Group/Process ID No.	SOP/GOP Index No.	Pollutant	Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
3	50EG-501	R7300	Exempt	None	§117.340(j) [G]§117.345(f)(6) [G]§117.345(f)(10)	None
3	50EG-501	60IIII	NMHC+ NOx	§60.4209(a)	§60.4214(b)	None
3	50EG-501	60IIII	CO	§60.4209(a)	§60.4214(b)	None
3	50EG-501	60IIII	PM	§60.4209(a)	§60.4214(b)	None

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Applicable Requirements Summary
Form OP-REQ3 (Page 3)
Federal Operating Permit Program

Table 2a: Deletions

Date: 12/06/2017	**Regulated Entity No.:** RN100212620	**Permit No.:** O-1400
Company Name: Eastman Chemical Texas City, Inc.	**Area Name:** Methanol and Acetic Acid Units	

Revision No.	Unit/Group/Process ID No.	Unit/Group/Process Applicable Form	SOP/GOP Index No.	Pollutant	Applicable Regulatory Requirement Name	Applicable Regulatory Requirement Standard(s)
4	44EG701	OP-2	R7ICI	EXEMPT	30 TAC Chapter 117, Subchapter B	[G]§117.303(a)(10) [G]]§117.310(f)
4	44EG701	OP-2	63ZZZZ	112(b) HAPS	40 CFR Part 63, Subpart ZZZZ	§63.6602

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Message

From: Wilson, Aimee [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E748328E8E504F0DBB3037E800992D3E-WILSON, AIMEE]
Sent: 8/9/2018 12:52:23 PM
To: Jesse Lovegren [Jesse.Lovegren@tceq.texas.gov]
CC: Rebecca Partee [rebecca.partee@tceq.texas.gov]
Subject: RE: Data on Huntsman Ethylene Oxide

Jesse,

Thanks for getting this together so fast! I truly appreciate it!

Thanks,
Aimee

From: Jesse Lovegren [mailto:Jesse.Lovegren@tceq.texas.gov]
Sent: Wednesday, August 08, 2018 5:35 PM
To: Wilson, Aimee <Wilson.Aimee@epa.gov>
Cc: Rebecca Partee <rebecca.partee@tceq.texas.gov>
Subject: Data on Huntsman Ethylene Oxide

Aimee,

Here's what I've gotten so far (spreadsheet attached).

First, I got a list of all of the EPNs that had reported EO emissions in our 2017 emissions inventory using our central registry query page:
http://www15.tceq.texas.gov/crpub/
There were 30 EPN's total with routine EO emissions, and 40 more with only non-routine EO emissions.

Then I got a list of all active air permits and PBRs (from the same database) at the site.

I narrowed your list down to 14 case-by-case permits and 142 PBR's. I looked at the MRT's from the permits and copied down all of the EPN's. I cross tabulated them to tie the routine EO-emitting EPN's and was able to get permits for 18 of them (you can probably do a better job with a human eye [I just used a computer]).

Feel free to call tomorrow if I can help further as you research the permits. I may be able to do a batch download of some basic files (e.g., technical review summary for a PBR), so please check in with me tomorrow about ways we can refine your search.

Best,

Jesse Lovegren, Ph.D., P.E.
512-239-1284
Air Permits Division
TCEQ

Message

From: Anna Rodriguez [anna.rodriguez@tceq.texas.gov]
Sent: 7/18/2017 9:49:02 PM
To: Arturo Garza [javier.garza@tceq.texas.gov]; Jayme Sadlier [jayme.sadlier@tceq.texas.gov]; Janis Hudson [janis.hudson@tceq.texas.gov]; John Minter [john.minter@tceq.texas.gov]; Terry Salem [terry.salem@tceq.texas.gov]; 'Mike.Wilson@tceq.texas.gov'; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Kim Strong [kim.strong@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Steve Hagle [steve.hagle@tceq.texas.gov]; Natalia Escobedo [natalia.escobedo@tceq.texas.gov]; Michael Wilhoit [michael.wilhoit@tceq.texas.gov]; Sierra Redding [Sierra.Redding@tceq.texas.gov]; Marc Sturdivant [marc.sturdivant@tceq.texas.gov]; Mike Coldiron [mike.coldiron@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Kati.Wooten@tceq.texas.gov; Betsy Peticolas [Betsy.Peticolas@Tceq.Texas.Gov]; Vasant Chaphekar [vasant.chaphekar@tceq.texas.gov]; Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Steven Hagood [steven.hagood@tceq.texas.gov]; Rebecca Partee [rebecca.partee@tceq.texas.gov]; Kate Brown [kate.brown@tceq.texas.gov]; Daniel Menendez [daniel.menendez@tceq.texas.gov]; Samuel Short [samuel.short@tceq.texas.gov]; Beryl Thatcher [Beryl.Thatcher@Tceq.Texas.Gov]
Subject: Texas PSD/Title V Monthly Call on Tuesday, July 18th at 10:00 am
Attachments: Summary of Call 7-18-17_NSR.docx; Summary of Call 7-18-17_TitleV.docx; Copy of TurbineTable_May 2017.xlsx; Projects Summaries 6-15-17 to 7-17-17.docx; Projects Summaries 5-15-17 to 6-15-17.docx; Projects Summaries 4-17-17 to 5-15-17.docx

Attached are summaries of my notes for the call held on July 18, 2017. The current turbine table is attached. Also attached are the projects summaries for May, June, and July. Since we didn't have calls in May and June, there are no call summaries for these two months. However, I still sent project summaries to EPA; those are attached for your information.

Please let me know if you have any questions.

Summary for Texas PSD/Title V (5/15/17 to 6/15/2017)

Issuance

- Lyondell Chemical Company (Pasadena, Harris County); Permit Nos. 137789 (initial) and N244 (initial) issued on 6/7/17. The company requested authorization to construct a new ethers unit to make methyl and ethyl tertiary butyl ethers from various raw materials comprised primarily of tertiary butyl alcohol, methanol, and ethanol. Prominent sources of air emissions include process vents and heaters, a cooling tower, storage vessels, process fugitive components in various liquid and gas services, and MSS emissions. Ancillary equipment/processes include diesel engines, loading operations, and sampling analyzers. With a 45.35 tpy project increase, nonattainment review is applicable only to VOCs.

Major Modification

- Alamo Cement Company (San Antonio, Bexar County); Permit Nos. 6758 (amendment), PSDTX145M2 (amendment), and GHGPSDTX143 (initial) authorized on 6/13/17. The company requested authorization for an additional Portland Cement kiln at an existing major site, which will result in the production of an additional 1.28 million tons of clinker per year. PSD was triggered for CO, $PM/PM_{10}/PM_{2.5}$, VOCs, and GHGs. The company is taking a federally enforceable NO_X limit on the existing kiln for a 923 tpy NO_X reduction and to net out of federal review for NO_X.

Second Notice

- Magellan Terminals Holdings, L.P. (Pasadena, Harris County); Permit Nos. 142261 (initial) and N254 (initial). Second public notice was authorized on 6/6/17 for these initial permits. The company is proposing to construct a marine terminal in Pasadena. The Pasadena Terminal will be constructed in four phases consisting of the following: internal floating roof storage tanks, horizontal fixed roof storage tanks, vertical fixed roof storage tanks, pressurized butane tanks, marine loading vapor recovery units (VRUs), marine loading fugitives, a truck loading VRU, truck unloading, equipment component fugitives, fire water pump engines, sumps, and tank landing vapor combustion units. Emissions from MSS activities associated with the new construction are also being authorized by this project. The terminal is located in a moderate nonattainment area for ozone, and a federal nonattainment review is required for VOCs.

Projects of Interest

Flexible Permits

Nothing additional from 5/15/17 to 6/15/17.

Portland Cement Plants

See information above under "Major Modification" for Alamo Cement Company.

Power Plants

Nothing additional from 5/15/17 to 6/15/17.

Contested Projects

NSR:

- GCGV Asset Holding LLC (Gregory, San Patricio County); Permit Nos. 146425 (initial), PSDTX1518 (initial), and GHGPSDTX170 (initial). After being authorized for first public notice on 5/11/17, a total of 50 public comments, including public hearing requests and meeting requests were received for these initial permits between 5/15/17 and 6/12/17. The company is proposing to construct a new chemicals manufacturing complex, including an Ethylene Plant (Steam Cracking process) that will run ethane, two low-pressure polyethylene units (most likely "swing" units that can produce either HDPE or LLDPE), a glycols plant (producing monoethylene glycol via ethylene oxide), a wastewater treatment plant, and truck and railcar logistics. An air separations unit and marine terminal are also associated with the project, but the company currently believes that these will belong to different sites.

Title V:

- A RTC letter for Permit O1440 Phillips 66 Company (Renewal, 20016) was sent to EPA for review on 5/25/17. The 45-day review period started on 5/30/17.
- TCEQ received comments from EIP on the renewal draft permit for Luminant Generation Company LLC, Sandow Steam Electric Station (FOP O54/Project 21871) on 5/12/17.

Message

From: Kordzi, Stephanie [Kordzi.Stephanie@epa.gov]
Sent: 8/9/2016 8:22:09 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
Subject: FW: Texas Notification Report *CORRECTION*
Attachments: epa_07052016.rtf; O1974_Eastman Chemical Company_SOB.docx; O1974_Eastman Chemical Company_SOP.docx; O3502_Enterprise Products Operating LLC_SOP.docx; O3502_Enterprise Products Operating LLC_SOB.docx; O1344_Alcoa World Alumina LLC_SOB.docx; O1344_Alcoa World Alumina LLC_SOP.docx; O2711_Kohler Co._SOP.docx; O2711_Kohler Co._SOB.docx; O72_NRG Texas Power LLC_SOB.docx; O72_NRG Texas Power LLC_SOP.docx; O1229_Exxon Mobil Corporation_SOP.pdf; O1229_Exxon Mobil Corporation_LTR.docx; O1229_Exxon Mobil Corporation_SOP.docx

From: Chikaodi Agumadu [mailto:Chikaodi.Agumadu@tceq.texas.gov]
Sent: Wednesday, July 06, 2016 9:24 AM
To: Kordzi, Stephanie <Kordzi.Stephanie@epa.gov>
Subject: FW: Texas Notification Report *CORRECTION*

Minor Revision Projects:
O1974 – EASTMAN CHEMICAL COMPANY
O3502 – ENTERPRISE PRODUCTS OPERATING LLC

Renewal Projects:
O1344 – ALCOA WORLD ALUMINA LLC
O2711 – KOHLER CO
O72 – NRG TEXAS POWER LLC

Response to Comments:
O1229 – Exxon Mobil Corporation

Chikaodi Agumadu
Texas Commission on Environmental Quality
12100 Park 35 Circle Bldg. C | Mail Code 163 | Austin, TX 78753
(512) 239-1267

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Eastman Chemical Company

Site Name: Eastman Chemical Company Texas Operations
Area Name: C5 - Ethylene Glycol
Physical Location: 300 Kodak Blvd
Nearest City: Longview
County: Harrison

Permit Number: O1974
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: June 27, 2016

Operating Permit
Basis of Determination

Description of Revisions

The FOP minor revision project includes revising EP037D516 unit subject to NSPS NNN regulations based on an OP-UA17 form submittal and updating the unit's preconstruction authorization. A previously granted permit shield from NSPS NNN applicability for the same unit is deleted.

Permit Area Process Description

This application area, Area C5, Ethylene Glycol, consists of two ethylene oxide/ethylene glycol plants and two solvents plants.

The two ethylene oxide/ethylene glycol plants produce ethylene oxide and ethylene glycols from ethylene and oxygen in a continuous process. The process steps include reaction, separation, product storage and product transfer. Emission units are reactors, process tanks, distillation units, process cooling towers and storage tanks; and emission control devices are flares. There are fugitive equipment leaks, heat exchanger leaks and wastewater. The types of emissions are volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

The solvents plants manufacture ethylene glycol ethers from ethylene oxide and alcohols or other glycols ethers. The manufacturing steps include materials storage, reaction, separation, product storage and product transfer. Emission units are reactors, process tanks, distillation units and storage tanks. There are fugitive equipment leaks, heat exchanger leaks and wastewater. The types of emissions are volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1436, O1968, O1970, O1971, O1972, O1973, O1975, O1976, O1977, O1978, O1979, O1981, O1982

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO2, PM, NOX, HAPS, CO, GHG

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the

requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by

30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes

40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.

13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
EP037T543A	40 CFR Part 63, Subpart G	63G-0007	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP037T543B	40 CFR Part 63, Subpart G	63G-0008	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP038T106	40 CFR Part 63, Subpart G	63G-0012	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP038T106A	40 CFR Part 63, Subpart G	63G-0013	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP038T131	40 CFR Part 63, Subpart G	63G-0014	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP039T113	40 CFR Part 63, Subpart G	63G-0022	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP039T606A	40 CFR Part 63, Subpart G	63G-0023	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP039T606B	40 CFR Part 63, Subpart G	63G-0024	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP104T51	40 CFR Part 63, Subpart G	63G-0028	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP104T52	40 CFR Part 63, Subpart G	63G-0029	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD020T116	40 CFR Part 63, Subpart G	63G-0047	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.

Unit ID	Regulation	Index Number	Basis of Determination*
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD021T137	40 CFR Part 63, Subpart G	63G-0036	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD093T2	40 CFR Part 63, Subpart G	63G-0037	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T3	40 CFR Part 63, Subpart G	63G-0038	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T4	40 CFR Part 63, Subpart G	63G-0039	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T5	40 CFR Part 63, Subpart G	63G-0040	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T6	40 CFR Part 63, Subpart G	63G-0041	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T7	40 CFR Part 63, Subpart G	63G-0042	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T8	40 CFR Part 63, Subpart G	63G-0043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD099T14	40 CFR Part 63, Subpart G	63G-0044	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD099T15	40 CFR Part 63, Subpart G	63G-0045	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD101T21	40 CFR Part 63, Subpart G	63G-0046	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.

Unit ID	Regulation	Index Number	Basis of Determination*
EP104FL1	30 TAC Chapter 111, Visible Emissions	R1111-0001	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
EP141FL1	30 TAC Chapter 111, Visible Emissions	R1111-0002	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
EP036FG1	40 CFR Part 63, Subpart H	63H-0001	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL)

Unit ID	Regulation	Index Number	Basis of Determination*
			FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP037FG1	40 CFR Part 63, Subpart H	63H-0002	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP038FG1	40 CFR Part 63, Subpart H	63H-0003	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP038FG2	40 CFR Part 63, Subpart H	63H-0004	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP036U1	30 TAC Chapter 111, Visible Emissions	R1111-0003	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
EP037U501	30 TAC Chapter 111, Visible Emissions	R1111-0004	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
EP038D101R	40 CFR Part 63, Subpart G	63G-0001	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Condenser used as a recovery device. Overlap = Title 40 CFR Part 63, Subpart G only

Unit ID	Regulation	Index Number	Basis of Determination*
			Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is greater than or equal to 50 ppm. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
EP038D601	40 CFR Part 63, Subpart G	63G-0002	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Absorber used as a recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is greater than or equal to 50 ppm. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
EP037D513	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
EP037D514	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.

Unit ID	Regulation	Index Number	Basis of Determination*
			Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
EP037D516	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
EP038D102R	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
PROEOEG1	40 CFR Part 63, Subpart F	63F-0001	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

Unit ID	Regulation	Index Number	Basis of Determination*
PROEOEG2	40 CFR Part 63, Subpart F	63F-0002	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
PROES1	40 CFR Part 63, Subpart F	63F-0003	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
PROES1	40 CFR Part 63, Subpart FFFF	63FFFF-0002	Designated Grp1 = The emission stream is not designated as Group 1. Determined Grp1 = The emission stream is determined to be Group 2.

Unit ID	Regulation	Index Number	Basis of Determination*
PROES2	40 CFR Part 63, Subpart F	63F-0004	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. Heat Exchange System = A heat exchange system is utilized. Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 1329	Issuance Date: 05/21/2007
Authorization No.: 49363	Issuance Date: 09/09/2004
Authorization No.: 52985	Issuance Date: 11/10/2005
Authorization No.: 6419	Issuance Date: 11/13/2006
Authorization No.: 84724	Issuance Date: 08/19/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 03/14/1997

Number: 106.264	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected.

The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: EP036U1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0003
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: EP037U501	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0004
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 20%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes

OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Eastman Chemical Company

AUTHORIZING THE OPERATION OF
Eastman Chemical Company Texas Operations
C5 - Ethylene Glycol
Industrial Organic Chemicals

LOCATED AT
Harrison County, Texas
Latitude 32° 26' 15" Longitude 94° 41' 37"
Regulated Entity Number: RN100219815

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1974 Issuance Date: November 12, 2014

[ADVANCE \x 144]For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart F, G, H and FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §§ 113.110, 113.120, 113.130 and 113.890 respectively which incorporates the 40 CFR Part 63 Subpart by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum

required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement.

However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

6. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

7. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General)

   B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

   C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

8. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. General Leak Detection Requirements:

      (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

      (ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

      (iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

(iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

9. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

10. For site remediation projects subject to 40 CFR Part 63, Subpart GGGGG that are completed within 30 consecutive calendar days the permit holder shall comply with 40 CFR § 63.7884(b), (b)(1) - (3) (Title 30 TAC, Subchapter C, § 113.1160 incorporated by reference).

11. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

12. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

13. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

14. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

15. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.

    A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.

    B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

16. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed

12 months and the certification must be submitted within 30 days after the end of the period being certified.

17. Use of Discrete Emission Credits to comply with the applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) If applicable, offsets for Title 30 TAC Chapter 116

        (iv) Temporarily exceed state NSR permit allowables

    B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

        (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

        (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

        (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Risk Management Plan

18. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Permit Location

19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 13

Applicable Requirements Summary 17

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EP036FG1	FUGITIVE EMISSION UNITS	N/A	63H-0001	40 CFR Part 63, Subpart H	No changing attributes.
EP036U1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-0003	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EP037D513	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP037D514	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP037D516	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP037FG1	FUGITIVE EMISSION UNITS	N/A	63H-0002	40 CFR Part 63, Subpart H	No changing attributes.
EP037T543A	STORAGE TANKS/VESSELS	N/A	63G-0007	40 CFR Part 63, Subpart G	No changing attributes.
EP037T543B	STORAGE TANKS/VESSELS	N/A	63G-0008	40 CFR Part 63, Subpart G	No changing attributes.
EP037U501	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-0004	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EP038D101R	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-0001	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EP038D102R	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP038D601	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-0002	40 CFR Part 63, Subpart G	No changing attributes.
EP038FG1	FUGITIVE EMISSION UNITS	N/A	63H-0003	40 CFR Part 63, Subpart H	No changing attributes.
EP038FG2	FUGITIVE EMISSION UNITS	N/A	63H-0004	40 CFR Part 63, Subpart H	No changing attributes.
EP038T106	STORAGE TANKS/VESSELS	N/A	63G-0012	40 CFR Part 63, Subpart G	No changing attributes.
EP038T106A	STORAGE TANKS/VESSELS	N/A	63G-0013	40 CFR Part 63, Subpart G	No changing attributes.
EP038T131	STORAGE TANKS/VESSELS	N/A	63G-0014	40 CFR Part 63, Subpart G	No changing attributes.
EP039T113	STORAGE TANKS/VESSELS	N/A	63G-0022	40 CFR Part 63, Subpart G	No changing attributes.
EP039T606A	STORAGE TANKS/VESSELS	N/A	63G-0023	40 CFR Part 63, Subpart G	No changing attributes.
EP039T606B	STORAGE TANKS/VESSELS	N/A	63G-0024	40 CFR Part 63, Subpart G	No changing attributes.
EP104FL1	FLARES	N/A	R1111-0001	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EP104T51	STORAGE	N/A	63G-0028	40 CFR Part 63, Subpart	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS			G	
EP104T52	STORAGE TANKS/VESSELS	N/A	63G-0029	40 CFR Part 63, Subpart G	No changing attributes.
EP141FL1	FLARES	N/A	R1111-0002	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PROEOEG1	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0001	40 CFR Part 63, Subpart F	No changing attributes.
PROEOEG2	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0002	40 CFR Part 63, Subpart F	No changing attributes.
PROES1	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0003	40 CFR Part 63, Subpart F	No changing attributes.
PROES1	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-0002	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROES2	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0004	40 CFR Part 63, Subpart F	No changing attributes.
SD020T116	STORAGE TANKS/VESSELS	N/A	63G-0047	40 CFR Part 63, Subpart G	No changing attributes.
SD021T137	STORAGE TANKS/VESSELS	N/A	63G-0036	40 CFR Part 63, Subpart G	No changing attributes.
SD093T2	STORAGE	N/A	63G-0037	40 CFR Part 63, Subpart	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS			G	
SD098T3	STORAGE TANKS/VESSELS	N/A	63G-0038	40 CFR Part 63, Subpart G	No changing attributes.
SD098T4	STORAGE TANKS/VESSELS	N/A	63G-0039	40 CFR Part 63, Subpart G	No changing attributes.
SD098T5	STORAGE TANKS/VESSELS	N/A	63G-0040	40 CFR Part 63, Subpart G	No changing attributes.
SD098T6	STORAGE TANKS/VESSELS	N/A	63G-0041	40 CFR Part 63, Subpart G	No changing attributes.
SD098T7	STORAGE TANKS/VESSELS	N/A	63G-0042	40 CFR Part 63, Subpart G	No changing attributes.
SD098T8	STORAGE TANKS/VESSELS	N/A	63G-0043	40 CFR Part 63, Subpart G	No changing attributes.
SD099T14	STORAGE TANKS/VESSELS	N/A	63G-0044	40 CFR Part 63, Subpart G	No changing attributes.
SD099T15	STORAGE TANKS/VESSELS	N/A	63G-0045	40 CFR Part 63, Subpart G	No changing attributes.
SD101T21	STORAGE TANKS/VESSELS	N/A	63G-0046	40 CFR Part 63, Subpart G	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a)	Standards: Pressure relief devices in liquid service.	[G]§ 63.169 [G]§ 63.180(b)	§ 63.181(a) [G]§ 63.181(b)	[G]§ 63.182(a) [G]§ 63.182(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	§63.169(a)-(d)	[G]§ 63.180(d)	§ 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036U1	EP	R1111-0003	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EP037D513	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
EP037D514	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness	[G]§ 60.664(e) § 60.664(f)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						(TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)		§ 60.665(l)(7) § 60.665(p)
EP037D516	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(i)	§ 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037T543	EU	63G-0007	112(B)	40 CFR Part 63,	§ 63.119(a)(3)	Group 2 tanks not using	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
A			HAPS	Subpart G		emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.			
EP037T543B	EU	63G-0008	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP037U501	EP	R1111-0004	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EP038D101R	EP	63G-0001	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
EP038D102R	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
EP038D601	EP	63G-0002	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B)	40 CFR Part 63,	[G]§ 63.169	Standards: Instrumentation	[G]§ 63.169	§ 63.181(a)	[G]§ 63.182(a)

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			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	systems. §63.169(a)-(d)	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.181(h)(8)	
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B)	40 CFR Part 63,	[G]§ 63.168	Standards: Valves in	[G]§ 63.168	§ 63.181(a)	[G]§ 63.182(a)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038T106	EU	63G-0012	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP038T106 A	EU	63G-0013	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP038T131	EU	63G-0014	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP039T113	EU	63G-0022	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						to comply with §63.119 to §63.123.			
EP039T606A	EU	63G-0023	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP039T606B	EU	63G-0024	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP104FL1	EU	R1111-0001	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
EP104T51	EU	63G-0028	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP104T52	EU	63G-0029	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						to comply with §63.119 to §63.123.			
EP141FL1	EU	R1111-0002	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
PROEOEG1	PRO	63F-0001	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
PROEOEG2	PRO	63F-0002	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
PROES1	PRO	63F-0003	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)
PROES1	PRO	63FFFF-	112(B)	40 CFR Part 63,	§ 63.2460(a)	You must meet each	[G]§	§ 63.2460(b)(6)(i)	§ 63.2460(b)(6)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		0002	HAPS	Subpart FFFF	§ 63.2450(b) § 63.2460(b)	emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c).	63.1257(d)(2)(i) [G]§ 63.1257(d)(2)(ii) § 63.2460(b)(1) § 63.2460(b)(2) § 63.2460(b)(3) [G]§ 63.2460(b)(4) § 63.2460(b)(7)	§ 63.2460(b)(7)	§ 63.2460(b)(6)(i) § 63.2460(b)(6)(ii) § 63.2460(b)(7)
PROES2	PRO	63F-0004	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)
SD020T116	EU	63G-0047	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD021T137	EU	63G-0036	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD093T2	EU	63G-0037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
SD098T3	EU	63G-0038	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T4	EU	63G-0039	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T5	EU	63G-0040	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T6	EU	63G-0041	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T7	EU	63G-0042	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
SD098T8	EU	63G-0043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD099T14	EU	63G-0044	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD099T15	EU	63G-0045	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD101T21	EU	63G-0046	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Additional Monitoring Requirements

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Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: EP036U1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0003
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 30%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: EP037U501	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0004
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 20%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036D10	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D10	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036D11	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D11	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D13	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D13	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D16	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D16	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D19	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036D19	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D20	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D20	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D3	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D3	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP036D4	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D4	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream contains less than 0.005 wt. % HAP.
EP036D5	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D5	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036D6	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D6	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP036D7	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D7	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036D8R	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP036D8R	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP036D9	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D9	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036FG1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP036FG1	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			service.
EP036FG1	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP036MWW1	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP036R1	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP036R1	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP036R1	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036R2	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP036R2	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP036R2	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036R3	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036R3	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP036R3	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036T4	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP036T4	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP036T4	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP036T4	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP036T4	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per 63.101 since the unit does not contain organic HAP.
EP036T4	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP036T43A	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP036T43A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP036T43A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			grade benzene.
EP036T43A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP036T43A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP036T43A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP036T43B	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP036T43B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP036T43B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP036T43B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP036T43B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP036T43B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP036U1	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036U1	N/A	40 CFR Part 63, Subpart Q	Unit did not operate with chromium based chemicals after 9/8/94.
EP036VS1	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036WW1	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP037D503	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP037D503	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D504	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D504	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream contains less than 0.005 wt. % HAP.
EP037D505	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037D505	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D506R	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP037D506R	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D507	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D507	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D508	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D508	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D509	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D509	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D510	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			reconstructed after 12/30/83.
EP037D510	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D511	N/A	40 CFR Part 60, Subpart NNN	Distillation system not constructed, modified, or reconstructed after 12/30/83.
EP037D511	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D512	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP037D512	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D513	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D514	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D515	N/A	40 CFR Part 60, Subpart NNN	Distillation system not constructed, modified, or reconstructed after 12/30/83.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037D515	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D516	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037FG1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP037FG1	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP037FG1	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP037MWW1	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP037R501A	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R501A	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R501A	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037R501B	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R501B	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R501B	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037R502	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R502	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R502	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037R503	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R503	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R503	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037R504	N/A	40 CFR Part 60, Subpart III	The reactor system has not been constructed, modified, or reconstructed

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			after 10/21/83.
EP037R504	N/A	40 CFR Part 60, Subpart RRR	The reactor system has not been constructed, modified, or reconstructed after 6/29/90.
EP037R504	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037T128	N/A	40 CFR Part 60, Subpart Kb	Unit storage capacity is less than 75 cubic meters.
EP037T128	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T128	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T128	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T128	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP037T128	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T504	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037T504	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T504	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T504	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T504	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP037T504	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T513	N/A	40 CFR Part 60, Subpart Kb	Unit storage capacity is less than 75 cubic meters.
EP037T513	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T513	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T513	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T513	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit is a surge

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			control vessel.
EP037T513	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T543A	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP037T543A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T543A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T543A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T543A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T543B	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP037T543B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T543B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T543B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T543B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037T544A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP037T544A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T544A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T544A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T544A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP037T544A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T544B	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP037T544B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T544B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T544B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T544B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP037T544B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037U501	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037U501	N/A	40 CFR Part 63, Subpart Q	Unit did not operate with chromium based chemicals after 9/8/94.
EP037VS1	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037WW1	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038D101R	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D102R	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D103	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			reconstructed after 12/30/83.
EP038D103	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D104	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D104	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D601	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D602	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D602	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D603	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D603	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP038D604	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D604	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038FG1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP038FG1	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP038FG1	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP038FG2	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP038FG2	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP038FG2	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP038J101	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038J601	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038MWW1	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038MWW2	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038R101	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP038R101	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP038R101	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent as gas stream is passed to another distillation unit (EP038D101R) before discharged into the atmosphere.
EP038R601	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP038R601	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP038R601	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent as gas stream is passed to another distillation

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			unit (EP038D601) before discharged into the atmosphere.
EP038T105	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T105	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T105	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T105	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T105	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T105	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T106	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T106	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T106	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP038T106	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T106	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T106A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T106A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T106A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T106A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T106A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T131	N/A	40 CFR Part 60, Subpart Kb	Unit storage capacity is less than 75 cubic meters.
EP038T131	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T131	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T131	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T131	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			category in Table 1 to §63.1100(a).
EP038T132A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T132A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T132A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T132A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T132A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T132A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T132B	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T132B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T132B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T132B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP038T132B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T132B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T605	N/A	40 CFR Part 60, Subpart Ka	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T605	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T605	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T605	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T605	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T605	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038WW1	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP038WW2	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP039T109	N/A	40 CFR Part 60, Subpart Ka	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T109	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T109	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T109	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T109	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T109	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T110	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T110	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T110	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			grade benzene.
EP039T110	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T110	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T110	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T111	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T111	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T111	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T111	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T111	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T111	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP039T112	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T112	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T112	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T112	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T112	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T112	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T113	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T113	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T113	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T113	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T113	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			category in Table 1 to §63.1100(a).
EP039T606A	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
EP039T606A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T606A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T606A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T606A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T606B	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
EP039T606B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T606B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T606B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T606B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T613	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
EP039T613	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			containing waste stream.
EP039T613	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T613	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T613	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP039T613	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T614	N/A	40 CFR Part 60, Subpart Ka	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T614	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T614	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T614	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T614	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP039T614	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104FL1	N/A	40 CFR Part 60, Subpart A	Unit not used to comply with part 60 or 61 standards.
EP104FL1	N/A	40 CFR Part 63, Subpart A	Unit not required by relevant part 63 standard.
EP104T161	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is between 75 cubic meters and 151 cubic meters and stores a liquid with a maximum true vapor pressure < 15 kPa.
EP104T161	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T161	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T161	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T161	N/A	40 CFR Part 63, Subpart G	Unit only manages wastewater from HON excluded activities.
EP104T161	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104T51	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP104T51	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			containing waste stream.
EP104T51	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T51	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T51	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104T52	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP104T52	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T52	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T52	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T52	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104T56	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP104T56	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T56	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP104T56	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T56	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per 63.101 since the unit does not contain organic HAP.
EP104T56	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to 63.1100(a).
EP104T57	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP104T57	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T57	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T57	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T57	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP104T57	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T11A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			(40,000 gallons).
EP105T11A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T11A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T11A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T11A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit is a surge control vessel.
EP105T11A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T11B	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP105T11B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T11B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T11B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T11B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			per §63.101 since the unit is a surge control vessel.
EP105T11B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T40	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP105T40	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T40	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T40	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T40	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP105T40	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T50	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP105T50	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T50	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			grade benzene.
EP105T50	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T50	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP105T50	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T53	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP105T53	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T53	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T53	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T53	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP105T53	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T540	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			(40,000 gallons).
EP105T540	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T540	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T540	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T540	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP105T540	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP141FL1	N/A	40 CFR Part 60, Subpart A	Unit not used to comply with part 60 or 61 standards.
EP141FL1	N/A	40 CFR Part 63, Subpart A	Unit not required by relevant part 63 standard.
PROEOEG1	N/A	40 CFR Part 63, Subpart FFFF	The MCPU is an affected source or part of an affected source under another MACT standard and does not include any process vents as identified in §63.100(j)(4).
PROEOEG1	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			in Table 1 to §63.1100(a).
PROEOEG2	N/A	40 CFR Part 63, Subpart FFFF	The MCPU is an affected source or part of an affected source under another MACT standard and does not include any process vents as identified in §63.100(j)(4).
PROEOEG2	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
PROES1	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
PROES2	N/A	40 CFR Part 63, Subpart FFFF	The MCPU is an affected source or part of an affected source under another MACT standard and does not include any process vents as identified in §63.100(j)(4).
PROES2	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
SD020T116	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD020T116	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD020T116	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD020T116	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD020T116	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD021T137	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD021T137	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD021T137	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD021T137	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD021T137	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD093T2	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD093T2	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD093T2	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD093T2	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD093T2	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T3	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD098T3	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T3	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T3	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T3	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T4	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T4	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T4	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T4	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T4	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T5	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T5	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T5	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD098T5	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T5	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T6	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T6	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T6	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T6	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T6	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T7	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T7	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T7	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T7	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T7	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD098T8	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T8	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T8	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T8	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T8	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD099T14	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
SD099T14	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD099T14	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD099T14	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD099T14	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD099T15	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
SD099T15	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD099T15	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD099T15	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD099T15	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD101T21	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD101T21	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD101T21	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD101T21	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD101T21	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

New Source Review Authorization References

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New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 1329	Issuance Date: 05/21/2007
Authorization No.: 49363	Issuance Date: 09/09/2004
Authorization No.: 52985	Issuance Date: 11/10/2005
Authorization No.: 6419	Issuance Date: 11/13/2006
Authorization No.: 84724	Issuance Date: 08/19/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 03/14/1997
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP036D10	EO-1 RESIDUAL EO ABSORBER COLUMN	49363
EP036D11	EG-1 GLYCOL PRECONCENTRATOR COLUMN	49363
EP036D13	EG-1 GLYCOL DEHYDRATOR COLUMN	49363
EP036D16	EG-1 POLYGLYCOL FLASH COLUMN	49363
EP036D19	EG-1 DEG STRIPPER COLUMN	49363
EP036D20	EG-1 TEG PURIFICATION COLUMN	49363
EP036D3	EO-1 CO2 ABSORBER COLUMN	49363
EP036D4	EO-1 CO2 STRIPPER COLUMN	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP036D5	EO-1 EO ABSORBER COLUMN	49363
EP036D6	EO-1 QUENCH BLEED STRIPPER COLUMN	49363
EP036D7	EO-1 EO STRIPPER COLUMN	49363
EP036D8R	EO-1 LIGHT ENDS COLUMN	49363
EP036D9	EO-1 EO PURIFICATION COLUMN	49363
EP036FG1	EO/EG PLANT NO. 1 EQUIPMENT FUGITIVES	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP036MWW1	EO/EG PLANT NO. 1 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP036R1	EO-1 EO REACTOR	49363

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP036R2	EG-1 GLYCOL REACTOR	49363
EP036R3	EO-1 ACETYLENE CONVERTER REACTOR	49363
EP036T43A	DEG RUNDOWN TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000
EP036T43B	EG RUNDOWN TANK	49363
EP036T4	EO-1 COOLANT SURGE TANK	49363
EP036U1	EO/EG PLANT NO. 1 PROCESS COOLING TOWER	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP036VS1	EO/EG-1 GLYCOL DISTILLATION COLUMN JETS	49363
EP036WW1	EO/EG PLANT NO. 1 WASTEWATER	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP037D503	EO-2 CO_2 ABSORBER COLUMN	1329
EP037D504	EO-2 CO_2 STRIPPER COLUMN	1329
EP037D505	EO-2 EO ABSORBER COLUMN	1329
EP037D506R	EO-2 QUENCH BLEED STRIPPER COLUMN	106.264/03/14/1997
EP037D507	EO-2 EO STRIPPER COLUMN	1329
EP037D508	EO-2 LIGHT ENDS COLUMN	1329
EP037D509	EO-2 EO PURIFICATION COLUMN	1329
EP037D510	EO-2 RESIDUAL EO ABSORBER COLUMN	1329

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP037D511	EG-2 GLYCOL PRECONCENTRATOR COLUMN	1329
EP037D512	EG-2 GLYCOL BLEED FLASHER COLUMN	1329
EP037D513	EG-2 GLYCOL DEHYDRATOR COLUMN	106.264/09/04/2000
EP037D514	EG-2 EG PURIFICATION COLUMN	106.264/09/04/2000
EP037D515	EG-2 EG RECYCLE COLUMN	1329
EP037D516	EG-2 DEG PURIFICATION COLUMN	106.264/09/04/2000
EP037FG1	EO/EG PLANT NO. 2 FUGITIVE EMISSIONS	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037MWW1	EO/EG PLANT NO. 2 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP037R501A	EO-2 EO REACTOR	1329
EP037R501B	EO-2 EO REACTOR	1329
EP037R502	EG-2 GLYCOL REACTOR	1329
EP037R503	EO-2 ACETYLENE CONVERTER REACTOR	1329
EP037R504	EO-1/2 METHANE ACETYLENE REACTOR	49363
EP037T128	EG-2 GLYCOL HIGH BOILERS STORAGE TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T504	EO-2 COOLANT SURGE DRUM	106.261/09/04/2000, 106.262/09/04/2000
EP037T513	EG-2 DIRTY CONDENSATE TANK	106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP037T543A	EG-2 EG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T543B	EG-2 EG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T544A	EG-2 DEG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T544B	EG-2 DEG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037U501	EO/EG PLANT NO. 2 PROCESS COOLING TOWER	1329
EP037VS1	EO/EG-2 GLYCOL DISTILLATION COLUMN JETS	1329
EP037WW1	EO/EG PLANT NO. 2 WASTEWATER	1329
EP038D101R	ES-1 ALCOHOL REMOVAL COLUMN	52985, 106.261/11/01/2003, 106.262/11/01/2003
EP038D102R	ES-1 MONO COLUMN	106.264/09/04/2000
EP038D103	ES-1 REFINING COLUMN	52985
EP038D104	ES-1 FLASHER COLUMN	52985
EP038D601	ES-2 ALCOHOL RECOVERY COLUMN	6419, 106.261/11/01/2003, 106.262/11/01/2003
EP038D602	ES-2 MONO COLUMN	6419
EP038D603	ES-2 DI COLUMN	6419

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP038D604	ES-2 DI-TRI FLASHER COLUMN	6419
EP038FG1	SOLVENTS PLANT NO. 1 EQUIPMENT LEAKS	52985, 106.261/11/01/2003, 106.262/11/01/2003
EP038FG2	SOLVENTS PLANT NO. 2 EQUIPMENT LEAKS	6419, 106.261/11/01/2003, 106.262/11/01/2003
EP038J101	ES-1 GLYCOL ETHER DISTILLATION COLUMN JETS	52985
EP038J601	ES-2 GLYCOL ETHER DISTILLATION COLUMN JETS	6419
EP038MWW1	SOLVENTS PLANT NO. 1 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP038MWW2	SOLVENTS PLANT NO. 2 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP038R101	ES-1 GLYCOL ETHER REACTOR	52985
EP038R601	ES-2 GLYCOL ETHER REACTOR	6419
EP038T105	ES-1 D-101 ACCUMULATOR TANK	52985, 106.261/11/01/2003, 106.262/11/01/2003
EP038T106A	ES-1 MONO RUNDOWN TANK	52985
EP038T106	ES-1 MONO RUNDOWN TANK	52985
EP038T131	ES-1 DI/TRI PROPYL RUNDOWN TANK	52985
EP038T132A	ES-1 DI RUNDOWN TANK	52985, 106.472/09/04/2000
EP038T132B	ES-1 DI RUNDOWN TANK	52985, 106.472/09/04/2000
EP038T605	ES-2 REFLUX ACCUMULATOR TANK	6419

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP038WW1	SOLVENTS PLANT NO. 1 WASTEWATER	52985
EP038WW2	SOLVENTS PLANT NO. 2 WASTEWATER	6419
EP039T109	ES-1 MIXED ALCOHOLS TANK	52985
EP039T110	ES-2 CRUDE GLYCOL ETHERS STORAGE TANK	6419
EP039T111	ES-2 HIGH BOILER STORAGE TANK	6419, 106.261/11/01/2003
EP039T112	ES-1 PROPYL HIGH BOILERS STORAGE TANK	52985, 106.472/09/04/2000
EP039T113	ES-1 CRUDE PROPYL ETHERS STORAGE TANK	52985
EP039T606A	ES-2 MONO RUNDOWN TANK	6419, 106.472/09/04/2000
EP039T606B	ES-2 MONO RUNDOWN TANK	6419, 106.264/03/14/1997
EP039T613	ES-2 ALCOHOL FEED TANK	6419, 106.262/09/04/2000
EP039T614	ES-2 ALCOHOL FEED TANK	6419
EP104FL1	EO/EG PLANT NO. 2 FLARE	1329, 84724, 106.183/09/04/2000
EP104T161	EO/EG PLANT NO. 2 FLARE TANK	1329
EP104T51	EG-2 EG STORAGE TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP104T52	EG-1 CRUDE GLYCOLS STORAGE TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP104T56	EG-2 DEG STORAGE TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP104T57	EG-2 POLYGLYCOL RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP105T11A	EO-1/2 EO RUNDOWN TANK	1329, 49363
EP105T11B	EO-1/2 EO RUNDOWN TANK	1329, 49363
EP105T40	EO-1 KEROSENE STORAGE TANK	49363
EP105T50	EG-1 TEG STORAGE TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000
EP105T53	EG-1 TTG STORAGE TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP105T540	EO-2 KEROSENE STORAGE TANK	1329, 106.472/09/04/2000
EP141FL1	EO-2 EMERGENCY FLARE	1329, 84724, 106.183/09/04/2000
PROEOEG1	EO/EG PLANT NO. 1 PROCESS	49363
PROEOEG2	EO/EG PLANT NO. 2 PROCESS	1329
PROES1	SOLVENTS PLANT NO. 1 PROCESS	52985
PROES2	SOLVENTS PLANT NO. 2 PROCESS	6419
SD020T116	ES-2 EP STORAGE TANK	6419, 106.472/09/04/2000
SD021T137	ES-2 DE STORAGE TANK	106.472/09/04/2000
SD093T2	ES-2 EP STORAGE TANK	6419, 106.472/09/04/2000
SD098T3	ES-2 DB STORAGE TANK	6419, 106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
SD098T4	ES-2 DB STORAGE TANK	6419, 106.472/09/04/2000
SD098T5	ES-2 DP STORAGE TANK	6419, 106.472/09/04/2000
SD098T6	ES-2 EEH STORAGE TANK	6419, 106.472/09/04/2000
SD098T7	ES-2 DTB STORAGE TANK	6419, 106.472/09/04/2000
SD098T8	ES-2 DTE STORAGE TANK	6419, 106.472/09/04/2000
SD099T14	ES-2 EB STORAGE TANK	6419, 106.472/09/04/2000
SD099T15	ES-2 EB STORAGE TANK	6419, 106.472/09/04/2000
SD101T21	ES-2 EEH STORAGE TANK	106.472/09/04/2000

Appendix A

Acronym List 92

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Message

From: Kordzi, Stephanie [Kordzi.Stephanie@epa.gov]
Sent: 8/9/2016 8:41:04 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
Subject: ExxonMobil Baytown - 45 day review ends 8/19/16 - Now entered on the latest Xcel spreadsheet and Lotus Notes
Attachments: O1229_Exxon Mobil Corporation_SOP.pdf; O1229_Exxon Mobil Corporation_LTR.docx; O1229_Exxon Mobil Corporation_SOP.docx; Received on 8-8-16.xlsx

Importance: High

Comment period ends on 8/19/16.

The permits from the correction are listed in this electronic folder:
H:\6PD\6PD-R\Texas\Title V\Permits\Permits due 2016 Jan-Dec\8-18-2016\8-19-2016 Corrections

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From: Chikaodi Agumadu [mailto:Chikaodi.Agumadu@tceq.texas.gov]
Sent: Wednesday, July 06, 2016 9:24 AM
To: Kordzi, Stephanie <Kordzi.Stephanie@epa.gov>
Subject: FW: Texas Notification Report *CORRECTION*

Minor Revision Projects:
O1974 – EASTMAN CHEMICAL COMPANY
O3502 – ENTERPRISE PRODUCTS OPERATING LLC

Renewal Projects:
O1344 – ALCOA WORLD ALUMINA LLC
O2711 – KOHLER CO
O72 – NRG TEXAS POWER LLC

Response to Comments:
O1229 – Exxon Mobil Corporation

Chikaodi Agumadu
Texas Commission on Environmental Quality
12100 Park 35 Circle Bldg. C | Mail Code 163 | Austin, TX 78753
(512) 239-1267

Message

From: Donna Williams [donna.williams@tceq.texas.gov]
Sent: 5/15/2017 2:04:51 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Mike Wilson [mike.wilson@tceq.texas.gov]; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Tan Nguyen [Tan.Nguyen@tceq.texas.gov]; Alfredo Mendoza [alfredo.mendoza@tceq.texas.gov]
Subject: Texas Notification Report
Attachments: EPA_20170515.rtf; O1375_LYONDELLBASELL ACETYLS LLC_SOB.docx; O1375_LYONDELLBASELL ACETYLS LLC_SOP.docx; O1891_INVISTA S A R L_SOB.docx; O1891_INVISTA S A R L_SOP.docx; O1986_CELANESE LTD_SOB.docx; O1986_CELANESE LTD_SOP.docx; O2082_EASTMAN COGENERATION LP_SOP.pdf; O2082_EASTMAN COGENERATION LP_SOB.docx; O22_CITY OF AUSTIN_SOB.docx; O22_CITY OF AUSTIN_SOP.pdf; O2883_OCCIDENTAL PERMIAN LTD_SOB.docx; O2883_OCCIDENTAL PERMIAN LTD_SOP.docx; O3536_NALCO COMPANY LLC_SOP.docx; O3536_NALCO COMPANY LLC_SOB.docx; O3764_KINDER MORGAN CRUDE & CONDENSATE LLC_SOB.docx; O3764_KINDER MORGAN CRUDE & CONDENSATE LLC_LTR.docx; O3764_KINDER MORGAN CRUDE & CONDENSATE LLC_SOP.pdf; O3944_ENBRIDGE PIPELINES TEXAS GATHERING LP_SOB.docx; O3944_ENBRIDGE PIPELINES TEXAS GATHERING LP_SOP.docx; O543_BRAZOS ELECTRIC POWER COOPERATIVE INC_SOB.docx; O543_BRAZOS ELECTRIC POWER COOPERATIVE INC_SOP.pdf

Initial Issuance Projects:
O3944 - ENBRIDGE PIPELINES TEXAS GATHERING LP

Minor Revision Projects:
O1375 - LYONDELLBASELL ACETYLS LLC
O2082 - EASTMAN COGENERATION LP
O22 - CITY OF AUSTIN
O3536 - NALCO COMPANY LLC

Renewal Projects:
O1891 - INVISTA S A R L
O1986 - CELANESE LTD
O2883 - OCCIDENTAL PERMIAN LTD
O543 - BRAZOS ELECTRIC POWER COOPERATIVE INC

Response to Comments:
O3764 - KINDER MORGAN CRUDE & CONDENSATE LLC

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Celanese Ltd.

Site Name: Clear Lake Plant
Area Name: Ethylene Oxide/Ethylene Glycol
Physical Location: PO Box 58190
Nearest City: Houston
County: Harris

Permit Number: O1986
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: April 21, 2017

Operating Permit
Basis of Determination

Permit Area Process Description

Ethylene Oxide (EO) Unit
EO is made by catalytic direct oxidation of ethylene with pure oxygen. The reaction is exothermic, and heat is removed from the reactors using high-grade kerosene. Reactor effluent gases are cooled and sent to EO absorber columns where EO is recovered in water. Remaining gases are recycled back to the reactors. CO2 is the main byproduct of the reaction, and a portion of the recycle gas stream is circulated through a CO2 removal system. CO2 removed from the stream goes to an incinerator, and remaining gas goes back to recycle. Water containing the absorbed EO goes to a stripper, and the EO overhead is purified by distillation. Water is recovered and recycled as lean absorbent to the EO absorber. Purified EO is the finished product.

Ethylene Glycol (EG) Unit
EG is made by the non-catalytic liquid phase hydrolysis of EO with water in reactors. EG is concentrated in three stages, and excess water is removed and recycled back to the reactors. The concentrated EG goes to purification columns, where EG is separated and sent to product storage. Heavier glycols are further purified and sent to product storage.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1893, O3678

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO2, PM, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements

    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often

required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the “Permit Shield” attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability

determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
32MN1138	30 TAC Chapter 117, Subchapter B	R7ICI-1	Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C). NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9) CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option CO Averaging Method = Complying with the applicable emission limit using a block one-hour average. CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS. EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid. Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average. NOx Reduction = None ESAD Date Placed in Service = Placed into service before October 1, 2001 and has not been modified, reconstructed or relocated on or after October 1, 2001. NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000 Diesel HP Rating = Horsepower rating is 300 hp or greater, but less than 600 hp.
32MN1138	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Displacement = The stationary CI RICE has a displacement less than 30 liters per cylinder and uses diesel fuel. Service Type = Emergency use where the RICE operates or is contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or that operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
32SU0006	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
32SU0016A	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
32SUAREA	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
32V1182	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
32V1182	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
32V145	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
32V145	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
32V193	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V193	30 TAC Chapter 115, Storage of	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V193	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has no by-pass lines. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Emission Control Type = Emissions routed to a process
32V194	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V194	30 TAC Chapter 115, Storage of VOCs	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V194	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has no by-pass lines. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6

Unit ID	Regulation	Index Number	Basis of Determination*
			kPa) Emission Control Type = Emissions routed to a process
32V195	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V195	30 TAC Chapter 115, Storage of VOCs	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V195	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has no by-pass lines. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Emission Control Type = Emissions routed to a process
32V220	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
32V220	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
32V222	30 TAC Chapter 115, Storage of	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
32V222	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
32V306	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V306	30 TAC Chapter 115, Storage of VOCs	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V306	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has no by-pass lines. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Emission Control Type = Emissions routed to a process
32V34	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V34	30 TAC Chapter 115, Storage of VOCs	R5112-2	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Other vapor recovery unit
32V34	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has no by-pass lines. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Emission Control Type = Emissions routed to a process
33V149	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V168	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V168	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
33V169	30 TAC Chapter	R5115-1	Today's Date = Today's date is March 1, 2013 or later.

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V169	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
33V170	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V170	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
33V171	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
33V171	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
33V172	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V172	40 CFR Part 60,	60Kb-01	Product Stored = Volatile organic liquid

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart Kb		Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
33V173	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
33V173	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
33V174	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
33V174	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
33V191	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V191	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
33V192	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
33V192	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
33V198	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V198	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
33V200	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V200	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
33V201	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
33V201	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
33V225	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.

Unit ID	Regulation	Index Number	Basis of Determination*
			Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V225	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
33V23	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V23	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
33V24	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V24	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
33V343	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V343	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.

Unit ID	Regulation	Index Number	Basis of Determination*
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
33V365	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
33V365	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
33V366	30 TAC Chapter 115, Storage of VOCs	R5115-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
33V366	40 CFR Part 63, Subpart G	63G119-1	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
36V1171	30 TAC Chapter 115, Storage of VOCs	30TAC-01	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
36V1171	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
32EOLD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-1	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.

Unit ID	Regulation	Index Number	Basis of Determination*
			Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. Control Options = Vapor control system that maintains a control efficiency of at least 90%.
32EOLD	40 CFR Part 63, Subpart G	63G126-1	Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111). Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants. Emissions Routing = Emissions of organic hazardous air pollutants are routed to a fuel gas system or to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv). Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device. Closed Vent System = Closed vent system is operated and maintained under negative pressure.
33EGLD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
33EGLD	40 CFR Part 63, Subpart G	63G126-1	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
33UNITLD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
33UNITLD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-2	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized. Control Options = Vapor balance system.

Unit ID	Regulation	Index Number	Basis of Determination*
33UNITLD	40 CFR Part 63, Subpart G	63G126-1	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
32FLR0001	30 TAC Chapter 111, Visible Emissions	R1111-1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
32FLR0001	30 TAC Chapter 111, Visible Emissions	R1111-2	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used only under emergency or upset conditions.
32FLR0001	30 TAC Chapter 115, HRVOC Vent Gas	R5722-1	Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d). Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Multi-Purpose Usage = Flare is used for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare. Flow Rate = Flow rate of the gas routed to the flare is determined using process knowledge and engineering calculations. Alternative Monitoring = No alternative monitoring and test methods are used. Physical Seal = Flare is equipped with a flow monitor or indicator. Monitoring Operations = Using the flow monitoring requirements in § 115.725(d)(1) §115.725(h)(4) Alternative = Using the continuous monitoring requirements in § 115.725(d)(2). Minor Modificaiton = No minor modifications to the monitoring and test methods are used. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC. Flare Type = Flare is in multi-purpose service.
EOEGFUG	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5780-1	Agitators = The fugitive unit does not contain agitators. Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Process Drains = The fugitive unit contains process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves. ACR = No open-ended valves or lines are complying with an alternate control requirement. Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service. Weight Percent HRVOC = Components in the fugitive unit contact process fluids that contain less than 5.0% HRVOC by weight and process fluids that contain HRVOC at 5.0%, or greater, by weight on an annual average basis. Complying with § 115.781(b)(9) = Process drains are complying with the requirements of § 115.781(b)(9). Pumps with Shaft Seal System = No pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.

Unit ID	Regulation	Index Number	Basis of Determination*
			Bypass Line Valves = The fugitive unit contains bypass line valves. Compressors with Shaft Seal System = No compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Flanges or Other Connectors = The fugitive unit contains flanges or other connectors. Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Pump Seals = The fugitive unit does not contain pump seals. ACR = No pressure relief valves are complying with an alternate control requirement. Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Complying with § 115.781(b)(9) = Pressure relief valves are complying with the requirements of § 115.781(b)(9).
EOEGFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-1	Agitators = The fugitive unit does not contain agitators. Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. 50% by Volume = Compressors are not in hydrogen service or are in hydrogen service and the hydrogen content cannot be reasonably expected to always exceed 50% by volume. Complying wIth § 115.352(1) = No valves are complying with § 115.352(1). Complying With § 115.352(1) = No open-ended valves and lines are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Process drains are not complying with the requirements in 30 TAC § 115.352(1).

Unit ID	Regulation	Index Number	Basis of Determination*
			Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. Shaft Seal System = Pump seals are not equipped with a shaft seal system that prevents or detects emission of VOC from the seal. TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. Shaft Seal System = Compressors are not equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. TVP of Process Fluid VOC <= 0.044 psia at 68° F = No valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Flanges do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = No pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit. Complying With § 115.352(1) = No compressor seals are complying with the requirements in 30 TAC § 115.352(1).
EOEGFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-2	Agitators = The fugitive unit does not contain agitators. Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358. Compressor Seals = The fugitive unit does not contain compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit does not contain pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.

Unit ID	Regulation	Index Number	Basis of Determination*
			Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. Complying wIth § 115.352(1) = No valves are complying with § 115.352(1). Complying With § 115.352(1) = No open-ended valves and lines are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Process drains are not complying with the requirements in 30 TAC § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal. TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 psia at 68° F = Valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC > 0.044 psia at 68° F = No valves contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges do not contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
EOEGFUG	40 CFR Part 63, Subpart H	63H160-1	ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT NOT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE = NONE OF THE EQUIPMENT IN ORGANIC HAP SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR IS IN HEAVY LIQUID SERVICE QIP = UNIT OPTS TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EOEGFUG	40 CFR Part 63, Subpart H	63H160-2	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES UNSAFE TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT NOT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
32MT3	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
32MT3	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-2	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater.

Unit ID	Regulation	Index Number	Basis of Determination*
			Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
32MT4	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
32MT4	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-2	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with § 115.764(a)(1), (b)(1), or (h)(1). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
32MT9	30 TAC Chapter 115, HRVOC Cooling Towers	R5760-1	Cooling Tower Heat Exchange System Exemptions = Each individual heat exchanger of the cooling tower heat exchange system does not have greater than 100 ppmw HRVOCs in the process side fluid.
32ANALYZER	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.

Unit ID	Regulation	Index Number	Basis of Determination*
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
32MAINAN	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt. Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director has not waived testing for identical vents. Testing Requirements = Continuous emissions monitoring system in lieu of testing requirements in § 115.725(a).
32MAINAN	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
32MAINT	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt. Vent Gas Stream Control = Vent gas stream is controlled by a flare.
32MAINT	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.

Unit ID	Regulation	Index Number	Basis of Determination*
32MAINT	40 CFR Part 63, Subpart G	63G113-1	Control Device = No recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. Regulation = Owners or operator is required to comply only with the requirements of 40 CFR Part 63, Subpart G. HAP Concentration = HAP concentration is not needed to determine applicability. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
32OXYAN	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt. Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director has not waived testing for identical vents. Testing Requirements = Continuous emissions monitoring system in lieu of testing requirements in § 115.725(a).
32OXYAN	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
32T111OH	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv.

Unit ID	Regulation	Index Number	Basis of Determination*
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
32T111OH	40 CFR Part 63, Subpart G	63G113-1	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = No recovery device. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G. HAP Concentration = HAP concentration is less than to 50 ppm. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR.
32T168OH	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
32T168OH	40 CFR Part 63, Subpart G	63G113-1	Control Device = No recovery device. Overlap = Title 40 CFR Part 63, Subpart G only

Unit ID	Regulation	Index Number	Basis of Determination*
			Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. Regulation = Owners or operator is required to comply only with the requirements of 40 CFR Part 63, Subpart G. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
32UGCAN	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt. Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director has not waived testing for identical vents. Testing Requirements = Continuous emissions monitoring system in lieu of testing requirements in § 115.725(a).
32UGCAN	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
32V144OH	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is greater than or equal to 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the

Unit ID	Regulation	Index Number	Basis of Determination*
			applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
32V150OH	30 TAC Chapter 115, Vent Gas Controls	R5121-108	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
32V150OH	30 TAC Chapter 115, Vent Gas Controls	R5121-109	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
32V150OH	30 TAC Chapter 115, Vent Gas Controls	R5121-UF	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
32V150OH	40 CFR Part 63, Subpart G	63G113-108	Control Device = Thermal hazardous waste incinerator meeting the requirement of 40 CFR § 63.116(b)(5). Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
32V150OH	40 CFR Part 63, Subpart G	63G113-109	Control Device = Thermal hazardous waste incinerator meeting the requirement of 40 CFR § 63.116(b)(5).

Unit ID	Regulation	Index Number	Basis of Determination*
			Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
32V150OH	40 CFR Part 63, Subpart G	63G113-UF	Control Device = No recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. Regulation = Owners or operator is required to comply only with the requirements of 40 CFR Part 63, Subpart G. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
32V156OH	30 TAC Chapter 115, Vent Gas Controls	R5121-UF	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
32V176OH	30 TAC Chapter 115, Vent Gas Controls	R5121-108	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
32V176OH	30 TAC Chapter	R5121-109	Alternate Control Requirement = Alternate control is not used.

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
32V176OH	30 TAC Chapter 115, Vent Gas Controls	R5121-COF	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
32V176OH	40 CFR Part 63, Subpart G	63G113-COF	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Flare Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = Owners or operator is required to comply only with the requirements of 40 CFR Part 63, Subpart G. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = No previous performance test was conducted.
32V181OH	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
32V182OH	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
32V219OH	30 TAC Chapter 115, Vent Gas Controls	R5121-108	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
32V219OH	30 TAC Chapter 115, Vent Gas Controls	R5121-109	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
32V219OH	30 TAC Chapter 115, Vent Gas Controls	R5121-UF	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
32V761OH	30 TAC Chapter 115, Vent Gas Controls	R5121-UF	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
33HOTWELL	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within

Unit ID	Regulation	Index Number	Basis of Determination*
			that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
33T106OH	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a non-combustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
33T106OH	40 CFR Part 63, Subpart G	63G113-1	Control Device = No recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. Regulation = Owners or operator is required to comply only with the requirements of 40 CFR Part 63, Subpart G. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Flow Indicator = By-pass line valve is secured with a car-seal or lock-and-key type configuration. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
32T111OH	40 CFR Part 60, Subpart NNN	60NNN-1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream.

Unit ID	Regulation	Index Number	Basis of Determination*
			Construction/Modification Date = After December 30, 1983. Subpart NNN Control Device = Condenser. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min. Organic Monitoring Device = A recovery device specific monitoring device is used to demonstrate compliance with the TRE index value limit of § 60.662(c).
PRO32EOEG	40 CFR Part 63, Subpart F	63F102-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. Heat Exchange System = No heat exchange system is utilized.
PRO32EOHE	40 CFR Part 63, Subpart F	63F104-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 55046	Issuance Date: 07/13/2010
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 03/14/1997
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

Number: 106.512	Version No./Date: 06/13/2001
Number: 106.532	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: 32V156OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-UF
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: 32V181OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: 32V182OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: 32V219OH	
Control Device ID No.: 60MN108INC	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-108
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: Minimum Combustion Temperature = 1585 degrees Fahrenheit	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: 32V219OH	
Control Device ID No.: 60MN109INC	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-109
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: Minimum Combustion Temperature = 1585 degrees Fahrenheit	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: 32V219OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-UF
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on April 3, 2017.
   Site rating: 0.21 / Satisfactory Company rating: 0.74 / Satisfactory
   (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? .....No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes

OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/De-painting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Celanese Ltd.

AUTHORIZING THE OPERATION OF
Clear Lake Plant
Ethylene Oxide/Ethylene Glycol
Industrial Organic Chemicals

LOCATED AT
Harris County, Texas
Latitude 29° 37' 17" Longitude 95° 3' 50"
Regulated Entity Number: RN100227016

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1986 Issuance Date: _____

_____

[ADVANCE \x 144]For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart F as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.110 which incorporates the 40 CFR Part 63 Subpart by reference.

F. Emission units subject to 40 CFR Part 63, Subpart G as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.120 which incorporates the 40 CFR Part 63 Subpart by reference.

G. Emission units subject to 40 CFR Part 63, Subpart H as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.130 which incorporates the 40 CFR Part 63 Subpart by reference.

H. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.

I. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.302 (relating to General Provisions)

(ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)

(iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit

J. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:

(i) Title 30 TAC § 101.352 (relating to General Provisions)

(ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)

(vi) Title 30 TAC § 101.359 (relating to Reporting)

(vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)

(viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

K. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.372 (relating to General Provisions)

(ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

(iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit

L. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 6 (Highly Reactive Volatile Organic Compound Emissions Cap and Trade Program) requirements:

(i) Title 30 TAC § 101.393 (relating to General Provisions)

(ii) Title 30 TAC § 101.394 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.396 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.399 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.400 (relating to Reporting)

(vi) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is

performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For solid fuel heating devices, the permit holder shall comply with the requirements of 30 TAC § 111.111(c).

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).

5. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:

A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks

(iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)

(v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)

(xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xvi) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification

(xvii) Title 30 TAC § 115.547(4) (relating to Exemptions)

B. For the degassing of all transport vessels with a nominal capacity of 8,000 gallons or more, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) and (d) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iii) Title 30 TAC § 115.542(b), (c) and (e) (relating to Control Requirements)

(iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(viii) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(ix) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(x) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xi) Title 30 TAC § 115.545(1) - (11) and (13) (relating to Approved Test Methods)

(xii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiii) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xiv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xv) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification

6. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter H, Division 1 for pressure relief devices not controlled by a flare:

A. Title 30 TAC § 115.725(c)

B. Title 30 TAC § 115.725(c)(1), (c)(1)(A) - (C)

C. Title 30 TAC § 115.725(c)(2)

D. Title 30 TAC § 115.725(c)(3), (c)(3)(A) - (E)

E. Title 30 TAC § 115.725(c)(4)

F. Title 30 TAC § 115.725(l)

G. Title 30 TAC § 115.726(c), (c)(1) - (4)

7. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams having no potential to emit HRVOC.

8. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams from sources exempt under 30 TAC § 115.727(c)(3).

9. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

   A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

   B. Title 40 CFR § 60.8 (relating to Performance Tests)

   C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

   D. Title 40 CFR § 60.12 (relating to Circumvention)

   E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

   F. Title 40 CFR § 60.14 (relating to Modification)

   G. Title 40 CFR § 60.15 (relating to Reconstruction)

   H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

10. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:

   A. Title 40 CFR § 61.05 (relating to Prohibited Activities)

   B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)

   C. Title 40 CFR § 61.09 (relating to Notification of Start-up)

   D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)

   E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)

   F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)

   G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)

   H. Title 40 CFR § 61.15 (relating to Modification)

   I. Title 40 CFR § 61.19 (relating to Circumvention)

11. For facilities where no benzene is present onsite in wastes, products, by-products or intermediates, the permit holder shall comply with the reporting requirement in 40 CFR § 61.357(a).

12. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

13. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance,

Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

14. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

    A. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General)

    B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

    C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

15. For the transfer of gas streams having the characteristics specified in § 63.107(b) - (h) or § 63.107(i) the permit holder shall comply with the following requirements:

    A. Title 40 CFR § 63.113(i) (relating to Process Vent Provisions - Reference Control Technology).

    B. Title 40 CFR § 63.152(b)(6), (c)(4)(iv) and (d)(4) (relating to General Reporting and Continuous Records).

16. For the transfer of Group 1 wastewater streams or residuals from Group 1 wastewater streams the permit holder shall comply with the following requirements:

    A. Title 40 CFR § 63.132(g) (relating to Process Wastewater Provisions - General)

    B. Title 40 CFR § 63.152(b)(5) and (c)(4)(iv) (relating to General Reporting and Continuous Records)

17. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

    A. General Leak Detection Requirements:

        (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

        (ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

        (iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

        (iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

    B. For closed vent system or vapor collection systems constructed of hard piping:

(i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements

C. For facilities operating flow indicators:

(i) Title 40 CFR § 63.148(f)(1) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(ii) Title 40 CFR § 63.148(f)(1), (i)(3)(i) (relating to Leak Inspection Provisions), for recordkeeping requirements

(iii) Title 40 CFR § 63.148(j)(2) (relating to Leak Inspection Provisions), for reporting requirements

D. For facilities not operating flow indicators:

(i) Title 40 CFR § 63.148(f)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(ii) Title 40 CFR § 63.148(i)(3)(ii) (relating to Leak Inspection Provisions), for recordkeeping requirements

(iii) Title 40 CFR § 63.148(j)(3) (relating to Leak Inspection Provisions), for reporting requirements

18. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

19. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in

40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

New Source Review Authorization Requirements

20. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

21. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

22. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

23. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

24. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

        (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

            (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

    B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).

    C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

25. Use of Emission Credits to comply with applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) Offsets for Title 30 TAC Chapter 116

    B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)

        (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

        (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

26. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

27. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

28. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

    A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

    B. The permit holder shall comply with 40 CFR Part 82, Subpart F related to the disposal requirements for appliances using Class I or Class II (ozone-depleting) substances or non-exempt substitutes as specified in 40 CFR §§ 82.150 - 82.166 and the applicable Part 82 Appendices.

Permit Location

29. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

30. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 18

Applicable Requirements Summary 34

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
32ANALYZER	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32EOLD	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
32EOLD	LOADING/UNLOADING OPERATIONS	N/A	63G126-1	40 CFR Part 63, Subpart G	No changing attributes.
32FLR0001	FLARES	N/A	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
32FLR0001	FLARES	N/A	R5722-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
32MAINAN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
32MAINAN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32MAINT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
32MAINT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32MAINT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-1	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
32MN1138	SRIC ENGINES	N/A	R7ICI-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
32MN1138	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
32MT3	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-1	30 TAC Chapter 115, HRVOC Cooling Towers	On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
32MT3	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-2	30 TAC Chapter 115, HRVOC Cooling Towers	On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
32MT4	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-1	30 TAC Chapter 115, HRVOC Cooling Towers	On-Line Monitor = A continuous on-line monitor capable of providing total HRVOC and speciated HRVOCs in ppbw is being used.
32MT4	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-2	30 TAC Chapter 115, HRVOC Cooling Towers	On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
32MT9	INDUSTRIAL PROCESS COOLING TOWERS	N/A	R5760-1	30 TAC Chapter 115, HRVOC Cooling Towers	No changing attributes.
32OXYAN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
32OXYAN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
32SU0006	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32SU0016A	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32SUAREA	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32T111OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32T111OH	DISTILLATION OPERATIONS	N/A	60NNN-1	40 CFR Part 60, Subpart NNN	No changing attributes.
32T111OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-1	40 CFR Part 63, Subpart G	No changing attributes.
32T168OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32T168OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-1	40 CFR Part 63, Subpart G	No changing attributes.
32UGCAN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5720-1	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
32UGCAN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32V1182	STORAGE	N/A	30TAC-01	30 TAC Chapter 115,	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS			Storage of VOCs	
32V144OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32V145	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V150OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-108	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
32V150OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-109	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
32V150OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-UF	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
32V150OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-108	40 CFR Part 63, Subpart G	Control Device = Thermal hazardous waste incinerator meeting the requirement of 40 CFR § 63.116(b)(5).
32V150OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-109	40 CFR Part 63, Subpart G	Control Device = Thermal hazardous waste incinerator meeting the requirement of 40 CFR § 63.116(b)(5).
32V150OH	EMISSION POINTS/STATIONARY	N/A	63G113-UF	40 CFR Part 63, Subpart G	Regulation = Owners or operator is required to comply only with

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				the requirements of 40 CFR Part 63, Subpart G., Control Device = No recovery device.
32V156OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-UF	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32V176OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-108	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
32V176OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-109	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
32V176OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-COF	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
32V176OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-COF	40 CFR Part 63, Subpart G	No changing attributes.
32V181OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32V182OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
32V193	STORAGE	N/A	R5112-1	30 TAC Chapter 115,	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS			Storage of VOCs	
32V193	STORAGE TANKS/VESSELS	N/A	R5112-2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V193	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
32V194	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V194	STORAGE TANKS/VESSELS	N/A	R5112-2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V194	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
32V195	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V195	STORAGE TANKS/VESSELS	N/A	R5112-2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V195	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
32V219OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-108	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
32V219OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-109	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
32V219OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-UF	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
32V220	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V222	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V306	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V306	STORAGE TANKS/VESSELS	N/A	R5112-2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V306	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
32V34	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V34	STORAGE TANKS/VESSELS	N/A	R5112-2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
32V34	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
32V761OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-UF	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
33EGLD	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
33EGLD	LOADING/UNLOADING OPERATIONS	N/A	63G126-1	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
33HOTWELL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
33T106OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
33T106OH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G113-1	40 CFR Part 63, Subpart G	No changing attributes.
33UNITLD	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
33UNITLD	LOADING/UNLOADING OPERATIONS	N/A	R5211-2	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized., Chapter 115 Control Device Type = No control device., Control Options = Vapor balance system., Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
33UNITLD	LOADING/UNLOADING OPERATIONS	N/A	63G126-1	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
33V149	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V168	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V168	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
33V169	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V169	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
33V170	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V171	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V172	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V173	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V174	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V191	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V191	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
33V192	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
33V192	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
33V198	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V200	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V201	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V225	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V225	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
33V23	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V24	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V343	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V343	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.
33V365	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V366	STORAGE TANKS/VESSELS	N/A	R5115-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
33V366	STORAGE TANKS/VESSELS	N/A	63G119-1	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
36V1171	STORAGE TANKS/VESSELS	N/A	30TAC-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
EOEGFUG	FUGITIVE EMISSION UNITS	N/A	R5780-1	30 TAC Chapter 115, HRVOC Fugitive Emissions	No changing attributes.
EOEGFUG	FUGITIVE EMISSION UNITS	N/A	R5352-1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Shaft Seal System = Compressors are not equipped with a shaft sealing system that prevents or detects emission of VOC from the seal., Shaft Seal System = Pump seals are not equipped with a shaft seal system that prevents or detects emission of VOC from the seal., TVP of Process Fluid VOC <= 0.044 psia at 68° F = No valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F., TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F., TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Flanges do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					greater than 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Pump seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Open-ended valves or lines do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Open-ended valves contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					VOC > 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a TVP greater than,
EOEGFUG	FUGITIVE EMISSION UNITS	N/A	R5352-2	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal., TVP of Process Fluid VOC <= 0.044 psia at 68° F = Valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F., TVP of Process Fluid VOC > 0.044 psia at 68° F = No valves contact a process fluid with a TVP greater than 0.044 psia at 68° F., TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges do not contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Open-ended valves or lines contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Open-ended valves do not contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit., TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Process drains do not contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit., Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1)., TVP of Process Fluid VOC > 0.04
EOEGFUG	FUGITIVE EMISSION UNITS	N/A	63H160-1	40 CFR Part 63, Subpart H	LIGHT LIQUID SERV (PUMPS) = COMPONENT PRESENT, ANY

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					(COMPRESSORS) = COMPONENT PRESENT, EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS, LIQUID SERVICE (PRD) = COMPONENT PRESENT, G/V OR LIGHT LIQ (VALVES) = COMPONENT PRESENT, HEAVY LIQ SERV (VALVES) = COMPONENT NOT PRESENT, QIP = UNIT OPTS TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES, G/V LIGHT LIQ (CONNECTOR) = COMPONENT PRESENT, HEAVY LIQ SERV (CONNECT) = COMPONENT PRESENT, ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT, REC/RECAP DEV (CVS) = COMPONENT NOT PRESENT, ENCL COMB DEV (CVS) = COMPONENT NOT PRESENT, FLARES (CVS) = COMPONENT PRESENT, HEAVY LIQUID SERVICE = NONE OF THE EQUIPMENT IN ORGANIC HAP SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR IS IN HEAVY LIQUID SERVICE
EOEGFUG	FUGITIVE EMISSION UNITS	N/A	63H160-2	40 CFR Part 63, Subpart H	LIGHT LIQUID SERV (PUMPS) = COMPONENT NOT PRESENT, ANY (COMPRESSORS) =

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					COMPONENT NOT PRESENT, LIQUID SERVICE (PRD) = COMPONENT NOT PRESENT, G/V OR LIGHT LIQ (VALVES) = COMPONENT NOT PRESENT, ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT
PRO32EOEG	CHEMICAL MANUFACTURING PROCESS	N/A	63F102-1	40 CFR Part 63, Subpart F	No changing attributes.
PRO32EOHE	CHEMICAL MANUFACTURING PROCESS	N/A	63F104-1	40 CFR Part 63, Subpart F	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
32ANALYZER	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
32EOLD	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the following methods.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
32EOLD	EU	63G126-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(a) § 63.126(a)(1) § 63.126(a)(2) § 63.126(a)(3) [G]§ 63.126(b)(4) [G]§ 63.126(d)(3) § 63.126(f) § 63.126(g) § 63.126(h)	For Group 1 transfer racks shall operate a vapor collection system and control device for organic HAPs.	[G]§ 63.126(d)(3) [G]§ 63.128(f) § 63.152(g)(1)(i) [G]§ 63.152(g)(1)(ii) § 63.152(g)(1)(iii) § 63.152(g)(1)(iv) [G]§ 63.152(g)(1)(v)	§ 63.129(a)(1) § 63.130(e) § 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(ii) [G]§ 63.152(a) [G]§ 63.152(f) § 63.152(g)(1) § 63.152(g)(1)(i) [G]§ 63.152(g)(1)(ii) § 63.152(g)(1)(iii)	§ 63.129(a)(2) § 63.129(a)(3) § 63.129(a)(8) § 63.130(d)(1) § 63.130(d)(2) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(b)(4) § 63.152(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.152(g)(1)(iv) [G]§ 63.152(g)(1)(v) [G]§ 63.152(g)(1)(vi) § 63.152(g)(2) § 63.152(g)(2)(i) § 63.152(g)(2)(ii) § 63.152(g)(2)(iii)	§ 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) § 63.152(g)(1) § 63.152(g)(2)(i) § 63.152(g)(2)(ii)
32FLR0001	EU	R1111-1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
32FLR0001	EP	R5722-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) [G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	[G]§ 115.725(d)(1) § 115.725(d)(2) § 115.725(d)(2)(A)(i) [G]§ 115.725(d)(2)(A)(ii) § 115.725(d)(2)(A)(iii) § 115.725(d)(2)(A)(iv) § 115.725(d)(2)(B) § 115.725(d)(2)(B)(i) § 115.725(d)(2)(B)(ii) § 115.725(d)(2)(B)(iii) § 115.725(d)(2)(B)(iv) § 115.725(d)(3) § 115.725(d)(4) § 115.725(d)(5)	§ 115.726(a)(1) § 115.726(a)(1)(A) § 115.726(d)(1) § 115.726(d)(10) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n) § 115.726(a)(1)(B) [G]§ 115.726(a)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.725(d)(2)(B)(iv) [G]§ 115.725(l) § 115.725(m)(2)(A) § 115.725(m)(2)(B) [G]§ 115.726(a)(2)		§ 115.725(d)(6) § 115.725(d)(7) § 115.725(k)(1) [G]§ 115.725(l) § 115.725(m)(1) § 115.725(m)(2)(A) § 115.725(m)(2)(B) § 115.725(n)		
32MAINAN	EP	R5720-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.725(a)(3) [G]§ 115.725(b)(1) [G]§ 115.725(l)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 2 of this subchapter must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.	§ 115.725(a)(3) § 115.725(a)(3)(B) § 115.725(a)(5) § 115.725(b) [G]§ 115.725(b)(1) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(4) § 115.726(b)(5) § 115.726(b)(6) [G]§ 115.726(g) [G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n)
32MAINAN	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
32MAINT	EP	R5720-	HIGHLY	30 TAC	§ 115.722(c)(1)	HRVOC emissions	§ 115.725(n)	§ 115.726(d)(1)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		1	REACTIVE VOC	Chapter 115, HRVOC Vent Gas	§ 115.722(c)(3) § 115.722(d) § 115.722(d)(1) § 115.722(d)(2)	at each site located in Harris County that is subject to this division or Division 2 of this subchapter must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.		§ 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) [G]§ 115.726(g) [G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	
32MAINT	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
32MAINT	EP	63G113-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)		[G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
32MN1138	EU	R7ICI-1	EXEMPT	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.			
32MN1138	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602-Table2c.1 § 63.6595(a)(1) § 63.6604(b) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) § 63.6640(f)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(a)-Table7.4 § 63.6650(f) [G]§ 63.6650(h)
32MT3	EU	R5760-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.761(c)(1) § 115.761(c)(3) § 115.764(a)(1) § 115.766(i)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 1 of this subchapter must not exceed 1,200 pounds of HRVOCs per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.	§ 115.764(a)(1) § 115.764(a)(3) [G]§ 115.764(a)(6) § 115.764(c)	§ 115.766(a)(1) § 115.766(a)(2) § 115.766(a)(3) § 115.766(a)(5) § 115.766(a)(6) § 115.766(c) [G]§ 115.766(g) [G]§ 115.766(h) § 115.766(i)(1)	§ 115.766(i)(2)
32MT3	EU	R5760-2	HIGHLY REACTIVE	30 TAC Chapter 115,	§ 115.761(c)(1) § 115.761(c)(3)	HRVOC emissions at each site located	§ 115.764(a)(1) § 115.764(a)(2)	§ 115.766(a)(1) § 115.766(a)(2)	§ 115.766(i)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			VOC	HRVOC Cooling Towers	§ 115.764(a)(1) § 115.764(a)(2) § 115.766(i)	in Harris County that is subject to this division or Division 1 of this subchapter must not exceed 1,200 pounds of HRVOCs per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.	§ 115.764(a)(3) § 115.764(a)(4) § 115.764(a)(5) § 115.764(c)	§ 115.766(a)(3) § 115.766(a)(4) § 115.766(a)(5) § 115.766(a)(6) § 115.766(c) [G]§ 115.766(g) [G]§ 115.766(h) § 115.766(i)(1)	
32MT4	EU	R5760-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.761(c)(1) § 115.761(c)(3) § 115.764(a)(1) § 115.766(i)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 1 of this subchapter must not exceed 1,200 pounds of HRVOCs per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.	§ 115.764(a)(1) § 115.764(a)(3) [G]§ 115.764(a)(6) § 115.764(c)	§ 115.766(a)(1) § 115.766(a)(2) § 115.766(a)(3) § 115.766(a)(5) § 115.766(a)(6) § 115.766(c) [G]§ 115.766(g) [G]§ 115.766(h) § 115.766(i)(1)	§ 115.766(i)(2)
32MT4	EU	R5760-2	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.761(c)(1) § 115.761(c)(3) § 115.764(a)(1) § 115.764(a)(2) § 115.766(i)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 1 of this	§ 115.764(a)(1) § 115.764(a)(2) § 115.764(a)(3) § 115.764(a)(4) § 115.764(a)(5) § 115.764(c)	§ 115.766(a)(1) § 115.766(a)(2) § 115.766(a)(3) § 115.766(a)(4) § 115.766(a)(5) § 115.766(a)(6)	§ 115.766(i)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						subchapter must not exceed 1,200 pounds of HRVOCs per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.		§ 115.766(c) [G]§ 115.766(g) [G]§ 115.766(h) § 115.766(i)(1)	
32MT9	EU	R5760-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Cooling Towers	§ 115.767(2)	Any cooling tower heat exchange system in which no individual heat exchanger has greater than 100 ppmw HRVOCs in the process side fluid is exempt from the requirements of this division, with the exception of the recordkeeping requirements of §115.766(b) and (c) of this title.	None	§ 115.766(b) § 115.766(b)(2) § 115.766(c)	None
32OXYAN	EP	R5720-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.725(a)(3) [G]§ 115.725(b)(1) [G]§ 115.725(l)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 2 of this subchapter must not exceed 1,200 pounds of HRVOC	§ 115.725(a)(3) § 115.725(a)(3)(B) § 115.725(a)(5) § 115.725(b) [G]§ 115.725(b)(1) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(4) § 115.726(b)(5) § 115.726(b)(6) [G]§ 115.726(g) [G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.			
32OXYAN	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
32SU0006	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
32SU0016A	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of this division.			
32SUAREA	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
32T111OH	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(C) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation vent gas stream with a flow rate < 0.011 scm/min (0.388 scf/min) or a VOC concentration < 500 ppmv is exempt from §115.121(a)(2)(A).	[G]§ 115.125 § 115.126(2) § 115.126(3)(D)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(D)	None
32T111OH	EP	60NNN-1	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
32T111OH	EP	63G113-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.110(d)(5)(ii) § 60.662(c) § 63.110(d)(5)(ii)(D) [G]§ 63.115(f)	If the Group 2 process vent has a TRE value greater than or equal to 1 as determined by the procedures in 40 CFR part 60 subpart NNN, the process vent is required to comply only with §63.110(d)(5)(ii)(A)-(D).	[G]§ 60.664(e) § 60.664(f) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2) [G]§ 63.115(a) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
32T168OH	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(C) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation vent gas stream with a flow rate < 0.011 scm/min (0.388 scf/min) or a VOC concentration < 500 ppmv is exempt from §115.121(a)(2)(A).	[G]§ 115.125 § 115.126(2) § 115.126(3)(D)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(D)	None
32T168OH	EP	63G113-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
32UGCAN	EP	R5720-1	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.725(a)(3) [G]§ 115.725(b)(1) [G]§ 115.725(l)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 2 of this subchapter must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.	§ 115.725(a)(3) § 115.725(a)(3)(B) § 115.725(a)(5) § 115.725(b) [G]§ 115.725(b)(1) [G]§ 115.725(l) § 115.725(n)	§ 115.726(b)(4) § 115.726(b)(5) § 115.726(b)(6) [G]§ 115.726(g) [G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(a)(5) § 115.725(n)
32UGCAN	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
32V1182	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
32V144OH	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
32V145	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
32V150OH	EP	R5121-108	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).			
32V150OH	EP	R5121-109	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
32V150OH	EP	R5121-UF	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).			
32V150OH	EP	63G113 -108	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
32V150OH	EP	63G113 -109	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						specified.			[G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
32V150OH	EP	63G113-UF	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
32V156OH	EP	R5121-UF	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).			
32V176OH	EP	R5121-108	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
32V176OH	EP	R5121-109	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).			
32V176OH	EP	R5121-COF	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
32V176OH	EP	63G113-COF	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare.§63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) § 63.114(d)(1) [G]§ 63.115(f) [G]§ 63.116(a)	§ 63.114(d)(1) [G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(3) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
32V181OH	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
32V182OH	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).			
32V193	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						condensate.			
32V193	EU	R5112-2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None
32V193	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(f) § 63.119(a)(2) [G]§ 63.119(f)(3)	Owner or operator who routes emissions to a fuel gas system or to a process, as defined in §63.111, to comply with §63.119(a)(1), or (a)(2) shall comply	None	§ 63.123(a) [G]§ 63.123(h) [G]§ 63.152(a)	§ 63.122(c)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						with §63.119(f)(1)-(3) as applicable.			§ 63.152(c)(2) § 63.152(c)(4)(ii)
32V194	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None
32V194	EU	R5112-2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
32V194	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(f) § 63.119(a)(2) [G]§ 63.119(f)(3)	Owner or operator who routes emissions to a fuel gas system or to a process, as defined in §63.111, to comply with §63.119(a)(1), or (a)(2) shall comply with §63.119(f)(1)-(3) as applicable.	None	§ 63.123(a) [G]§ 63.123(h) [G]§ 63.152(a)	§ 63.122(c)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii)
32V195	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
32V195	EU	R5112-2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
32V195	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(f) § 63.119(a)(2) [G]§ 63.119(f)(3)	Owner or operator who routes emissions to a fuel gas system or to a process, as defined in §63.111, to comply with §63.119(a)(1), or (a)(2) shall comply with §63.119(f)(1)-(3) as applicable.	None	§ 63.123(a) [G]§ 63.123(h) [G]§ 63.152(a)	§ 63.122(c)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii)
32V219OH	EP	R5121-108	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(A)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						devices).			
32V219OH	EP	R5121-109	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(A)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
32V219OH	EP	R5121-UF	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						devices).			
32V220	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
32V222	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
32V306	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
32V306	EU	R5112-2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
32V306	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(f) § 63.119(a)(2) [G]§ 63.119(f)(3)	Owner or operator who routes emissions to a fuel gas system or to a process, as defined in §63.111, to comply with §63.119(a)(1), or (a)(2) shall comply with §63.119(f)(1)-(3) as applicable.	None	§ 63.123(a) [G]§ 63.123(h) [G]§ 63.152(a)	§ 63.122(c)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii)
32V34	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
32V34	EU	R5112-2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(B)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) [G]§ 115.115(a)(5) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(E) § 115.118(a)(5) § 115.118(a)(7)	None
32V34	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(f) § 63.119(a)(2) [G]§ 63.119(f)(3)	Owner or operator who routes emissions to a fuel gas system or to a process, as defined in §63.111, to comply with §63.119(a)(1), or (a)(2) shall comply with §63.119(f)(1)-(3) as applicable.	None	§ 63.123(a) [G]§ 63.123(h) [G]§ 63.152(a)	§ 63.122(c)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
32V761OH	EP	R5121-UF	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
33EGLD	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
33EGLD	EU	63G126-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						other provisions for transfer racks apply to the Group 2 transfer rack.		§ 63.130(f)(3)(ii)	
33HOTWELL	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(C) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation vent gas stream with a flow rate < 0.011 scm/min (0.388 scf/min) or a VOC concentration < 500 ppmv is exempt from §115.121(a)(2)(A).	[G]§ 115.125 § 115.126(2) § 115.126(3)(D)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(D)	None
33T106OH	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(C) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation vent gas stream with a flow rate < 0.011 scm/min (0.388 scf/min) or a VOC concentration < 500 ppmv is exempt from §115.121(a)(2)(A).	[G]§ 115.125 § 115.126(2) § 115.126(3)(D)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(D)	None
33T106OH	EP	63G113-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						sections as specified.			[G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
33UNITLD	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
33UNITLD	EU	R5211-2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(B) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						following methods.			
33UNITLD	EU	63G126-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
33V149	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V168	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V168	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.			
33V169	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V169	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
33V170	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						this division.			
33V171	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
33V172	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V173	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
33V174	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						true vapor pressure less than 1.5 psia is exempt from the requirements of this division.			
33V191	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V191	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
33V192	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						this division.			
33V192	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
33V198	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V200	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V201	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.			
33V225	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V225	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
33V23	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of this division.			
33V24	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V343	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V343	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
33V365	EU	30TAC-01	VOC	30 TAC Chapter 115,	§ 115.111(a)(1)	Except as provided in § 115.118, a	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Storage of VOCs		storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
33V366	EU	R5115-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
33V366	EU	63G119-1	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
36V1171	EU	30TAC-01	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						from the requirements of this division.			
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.783(4)(A)(i) § 115.783(4)(A)(ii) § 115.783(4)(A)(ii)(I) § 115.783(4)(A)(ii)(II) § 115.783(4)(B) § 115.783(4)(B)(i) § 115.783(4)(B)(ii)	Process drains within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(5) § 115.781(b)(6) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c)
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a)	Pressure relief valves (in gaseous service) within a	§ 115.354(1) § 115.354(10) § 115.354(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.788(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Fugitive Emissions	§ 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.787(e) § 115.787(f) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(b)(8) § 115.781(e) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	[G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	[G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) [G]§ 115.781(d) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2)	Bypass line valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) [G]§ 115.781(d) § 115.781(g)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) § 115.786(a)(1) § 115.786(a)(2)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(1) § 115.783(1)(A) § 115.783(1)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.786(a)(1)	§ 115.786(a)(2)(A) § 115.786(a)(2)(B) § 115.786(b)(1) § 115.786(b)(2) § 115.786(b)(2)(A) § 115.786(b)(2)(B) § 115.786(b)(2)(C) [G]§ 115.786(b)(3) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii)	Valves within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	operation which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Flanges or other connectors within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv) § 115.782(c)(1)(C)(i) § 115.782(c)(1)(C)(i)(I) § 115.782(c)(1)(C)(i)(II) § 115.782(c)(1)(C)(i)(III) § 115.782(c)(1)(C)(ii) § 115.783(3) [G]§ 115.783(3)(A) [G]§ 115.783(3)(B) § 115.787(b)	Compressor seals within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(c)(1) § 115.781(c)(2) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) § 115.783(3)(C) [G]§ 115.786(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						concentration greater than 500 ppmv above background as methane for all components.			
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(1) § 115.782(c)(1)(A) § 115.782(c)(1)(B) [G]§ 115.782(c)(1)(B)(i) § 115.782(c)(1)(B)(ii) [G]§ 115.782(c)(1)(B)(iii) § 115.782(c)(1)(B)(iv)	Heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolted manways, hatches, sump covers, junction box vents, and covers and seals on VOC water separators within the process unit or processes listed in §115.780(a) in which a HRVOC is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) [G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(1) § 115.786(d)(2) § 115.786(d)(2)(A) § 115.786(d)(2)(B) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g)	[G]§ 115.782(c)(1)(B)(i) [G]§ 115.786(c) § 115.789(1)(B)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.781(b)(9) § 115.780(b) [G]§ 115.781(a) § 115.781(g)(3) § 115.782(a) § 115.782(b)(1) § 115.782(b)(2) § 115.782(c)(2) § 115.782(c)(2)(A) § 115.782(c)(2)(A)(i) § 115.782(c)(2)(A)(ii) § 115.782(c)(2)(B) § 115.783(5) § 115.787(f) § 115.787(f)(2) § 115.787(f)(3) § 115.787(f)(4) § 115.787(g) § 115.788(a) § 115.788(a)(1) § 115.788(a)(2) § 115.788(a)(2)(A) § 115.788(a)(2)(B) § 115.788(a)(2)(C) § 115.788(a)(2)(C)(i) § 115.788(a)(2)(C)(ii) § 115.788(a)(2)(C)(iii) § 115.788(a)(2)(D) § 115.788(a)(3) § 115.788(a)(3)(A) § 115.788(a)(3)(B) [G]§ 115.788(g)	Open-ended valves or lines within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process; or natural gas/gasoline processing operation in which a highly-reactive volatile organic compound is a raw material, intermediate, final product, or in a waste stream is subject to the requirements of this division. A leak is defined as a screening concentration greater than 500 ppmv above background as methane for all components.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) § 115.781(b) § 115.781(b)(10) § 115.781(b)(3) § 115.781(b)(4) § 115.781(b)(7) § 115.781(b)(7)(A) § 115.781(b)(7)(B) § 115.781(f) § 115.781(f)(1) § 115.781(f)(2) § 115.781(f)(3) § 115.781(f)(4) § 115.781(f)(5) § 115.781(f)(6) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.782(d)(2) § 115.789(1)(B)	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5) § 115.781(b)(10) § 115.781(g) § 115.781(g)(1) § 115.781(g)(2) § 115.781(g)(3) § 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.786(d) § 115.786(d)(2) § 115.786(d)(2)(C) § 115.786(e) § 115.786(g) [G]§ 115.788(g)	§ 115.782(c)(2)(A)(ii) [G]§ 115.786(c) § 115.788(c) [G]§ 115.788(d) § 115.788(e) [G]§ 115.788(g) § 115.789(1)(B)
EOEGFUG	EU	R5780-1	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Fugitive Emissions	§ 115.787(a)	Components that contact a process fluid containing less than 5.0% highly-reactive	None	§ 115.786(e) § 115.786(g)	None

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						volatile organic compounds by weight on an annual average basis are exempt from the requirements of this division (relating to Fugitive Emissions), except for 115.786(e) and (g) of this title (relating to Record keeping Requirements).			
EOEGFUG	EU	R5352-1	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
EOEGFUG	EU	R5352-1	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.			
EOEGFUG	EU	R5352-1	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
EOEGFUG	EU	R5352-1	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
EOEGFUG	EU	R5352-1	VOC	30 TAC Chapter 115,	§ 115.352(1)(A) § 115.352(1)	No flanges or other connectors	§ 115.354(1) § 115.354(10)	§ 115.352(7) § 115.354(10)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Pet. Refinery & Petrochemicals	§ 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.			
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						sight, smell, or sound.			
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
EOEGFUG	EU	R5352-2	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						exuding of process fluid based on sight, smell, or sound.			
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Connectors in heavy liquid service.	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171	§63.169(a)-(d)		[G]§ 63.181(i)	§ 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.172(d) § 63.11(b) § 63.172(e) [G]§ 63.172(h) § 63.172(m)	Flares used to comply with this subpart shall comply with the requirements of § 63.11(b) of 40 CFR 63, Subpart A.	§ 63.172(e) [G]§ 63.172(h) [G]§ 63.180(b) [G]§ 63.180(d) [G]§ 63.180(e)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) § 63.181(g)(1)(iii) § 63.181(g)(1)(iv) [G]§ 63.181(g)(2)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16	112(B)	40 CFR Part 63,	[G]§ 63.174	Standards:	[G]§ 63.174	§ 63.181(a)	[G]§ 63.182(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		0-1	HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.172(a) [G]§ 63.172(h) § 63.172(i) § 63.172(m)	Owners/operators of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in §63.162(b).	[G]§ 63.172(f)(1) [G]§ 63.172(f)(2) § 63.172(g) [G]§ 63.172(h) [G]§ 63.172(k) [G]§ 63.172(l) [G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.172(k) [G]§ 63.172(l) § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) [G]§ 63.181(g)(2) [G]§ 63.181(g)(3)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H16 0-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								[G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	
EOEGFUG	EU	63H160-1	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H160-2	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H160-2	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H160-2	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EOEGFUG	EU	63H160-2	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H160-2	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EOEGFUG	EU	63H160-2	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
PRO32EOEG	PRO	63F102-1	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PRO32EOHE	PRO	63F104-1	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)

Additional Monitoring Requirements

Compliance Assurance Monitoring Summary 95

CAM Summary

Unit/Group/Process Information	
ID No.: 32V156OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-UF
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.	

CAM Summary

Unit/Group/Process Information	
ID No.: 32V181OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.	

CAM Summary

Unit/Group/Process Information	
ID No.: 32V182OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.	

CAM Summary

Unit/Group/Process Information	
ID No.: 32V219OH	
Control Device ID No.: 60MN108INC	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-108
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: Minimum Combustion Temperature = 1585 degrees Fahrenheit	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

CAM Summary

Unit/Group/Process Information	
ID No.: 32V219OH	
Control Device ID No.: 60MN109INC	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-109
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: Minimum Combustion Temperature = 1585 degrees Fahrenheit	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

CAM Summary

Unit/Group/Process Information	
ID No.: 32V219OH	
Control Device ID No.: 26UTLFLR	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-UF
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: n/a	
Deviation Limit: No Pilot Flame	
CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.	

Permit Shield

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Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
32EORX	N/A	40 CFR Part 60, Subpart RRR	Was not constructed, reconstructed or modified after 6/29/90
32MT3	N/A	40 CFR Part 63, Subpart Q	Cooling tower not operated with chromium-based water treatment chemicals on or after 9/8/94
32MT4	N/A	40 CFR Part 63, Subpart Q	Cooling tower not operated with chromium-based water treatment chemicals on or after 9/8/94
32MT9	N/A	40 CFR Part 63, Subpart Q	Cooling tower not operated with chromium-based water treatment chemicals on or after 9/8/94
32SU0006	N/A	40 CFR Part 60, Subpart K	Vessel does not store petroleum liquid.
32SU0016A	N/A	40 CFR Part 60, Subpart K	Vessel does not store petroleum liquid.
32SUAREA	N/A	40 CFR Part 60, Subpart K	Vessel does not store petroleum liquid.
32T168OH	N/A	40 CFR Part 60, Subpart NNN	Was not constructed, reconstructed or modified after 12/30/83.
32V1182	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a design capacity <75m3 (19,800 gal).
32V144OH	N/A	40 CFR Part 60, Subpart NNN	Facility does not meet the definition of a “distillation operation”.
32V144OH	N/A	40 CFR Part 63, Subpart G	Vent does not originate in a distillation or reaction process and thus does not meet “process vent” definition”.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
32V145	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
32V156OH	N/A	40 CFR Part 63, Subpart G	Vent contains < 50ppmw HAP and thus does not meet “process vent” definition.
32V181OH	N/A	40 CFR Part 60, Subpart NNN	Facility does not meet the definition of a “distillation operation”.
32V181OH	N/A	40 CFR Part 63, Subpart G	Vent does not originate in a distillation or reaction process and thus does not meet “process vent” definition.
32V182OH	N/A	40 CFR Part 60, Subpart NNN	Facility does not meet the definition of a “distillation operation”.
32V182OH	N/A	40 CFR Part 63, Subpart G	Vent does not originate in a distillation or reaction process and thus does not meet “process vent” definition.
32V193	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
32V194	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
32V195	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			comply with the provisions of MACT G.
32V219OH	N/A	40 CFR Part 60, Subpart NNN	Facility does not meet the definition of a “distillation operation”.
32V219OH	N/A	40 CFR Part 63, Subpart G	Vent does not originate in a distillation or reaction process and thus does not meet “process vent” definition.
32V220	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
32V222	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
32V306	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
32V34	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
32V761OH	N/A	40 CFR Part 60, Subpart NNN	Facility does not meet the definition of a “distillation operation”.
32V761OH	N/A	40 CFR Part 63, Subpart G	Vent does not originate in a distillation or reaction process and thus does not meet

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			"process vent" definition.
33EGRX	N/A	40 CFR Part 60, Subpart RRR	Was not constructed, reconstructed, or modified after 6/29/90.
33V149	N/A	40 CFR Part 60, Subpart K	Vessel does not store petroleum liquid.
33V168	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
33V169	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
33V170	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V171	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V172	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a design capacity less than 75 cubic meters (19,800 gallons).
33V173	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
33V174	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V191	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
33V192	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
33V198	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V200	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V201	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V225	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
33V23	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V24	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V343	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
33V365	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
33V366	N/A	40 CFR Part 60, Subpart Kb	A MACT G storage vessel that is also subject to NSPS Kb is only required to comply with the provisions of MACT G.
36V1171	N/A	40 CFR Part 60, Subpart Kb	Storage vessel has a capacity greater than 151 cubic meters, and stores a material with a true vapor pressure less than 0.5 psia.
EOEGFUG	N/A	40 CFR Part 60, Subpart VV	Was not constructed, reconstructed or modified after 1/5/81.

New Source Review Authorization References

New Source Review Authorization References 109

New Source Review Authorization References by Emission Unit 110

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 55046	Issuance Date: 03/21/2017
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 03/14/1997
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
32ANALYZER	ANALYZER VENT	106.261/11/01/2003, 106.262/11/01/2003
32EOLD	EO LOADING RACK	55046
32EORX	EO REACTORS	55046
32FLR0001	EMERGENCY AND MAINTENANCE FLARE	55046
32MAINAN	ANALYZER VENT	55046
32MAINT	MAINTENANCE VENT	55046
32MN1138	UPS GENERATOR DIESEL ENGINE	106.511/09/04/2000
32MT3	UTILITY COOLING TOWER	55046
32MT4	UTILITY COOLING TOWER	55046
32MT9	PROCESS COOLING TOWER	55046
32OXYAN	ANALYZER VENT	55046
32SU0006	STORAGE VESSEL	55046
32SU0016A	STORAGE VESSEL	55046
32SUAREA	STORAGE VESSEL	55046
32T111OH	RECOVERY TOWER	55046
32T168OH	RECOVERY TOWER	55046
32UGCAN	ANALYZER VENT	55046
32V1182	STORAGE VESSEL	55046
32V144OH	PROCESS VENT	55046

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
32V145	STORAGE VESSEL	55046
32V150OH	DISTILLATION UNIT	55046
32V156OH	DISTILLATION UNIT	55046
32V176OH	DISTILLATION UNIT	55046
32V181OH	GUARD BED VENT	55046
32V182OH	GUARD BED VENT	55046
32V193	STORAGE VESSEL	55046
32V194	STORAGE VESSEL	55046
32V195	STORAGE VESSEL	55046
32V219OH	METHANE TAIL GAS VENT	55046
32V220	STORAGE VESSEL	55046
32V222	STORAGE VESSEL	55046
32V306	STORAGE VESSEL	55046
32V34	STORAGE VESSEL	55046
32V761OH	GUARD BED VENT	55046
33EGLD	EG LOADING RACK	55046
33EGRX	EG REACTORS	55046
33HOTWELL	BAROMETRIC SUMP VENTS	55046
33T106OH	DISTILLATION UNIT	55046

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
33UNITLD	EG UNIT LOADING/UNLOADING	55046
33V149	STORAGE VESSEL	55046
33V168	STORAGE VESSEL	55046, 106.264/09/04/2000
33V169	STORAGE VESSEL	55046
33V170	STORAGE VESSEL	55046
33V171	STORAGE TANK	55046
33V172	STORAGE TANK	55046
33V173	STORAGE VESSEL	55046
33V174	STORAGE VESSEL	55046
33V191	STORAGE VESSEL	55046
33V192	STORAGE VESSEL	55046
33V198	STORAGE VESSEL	55046
33V200	STORAGE VESSEL	55046
33V201	STORAGE VESSEL	55046
33V225	STORAGE VESSEL	55046
33V23	STORAGE VESSEL	55046
33V24	STORAGE VESSEL	55046
33V343	STORAGE VESSEL	55046
33V365	STORAGE VESSEL	55046

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
33V366	STORAGE VESSEL	55046
36V1171	STORAGE VESSEL	55046
EOEGFUG	FUGITIVES	55046
PRO32EOEG	EO/EG MAINTENANCE WASTEWATER	55046
PRO32EOHE	HEAT EXCHANGER SYSTEM	55046

Appendix A

Acronym List 115

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Nalco Company LLC

AUTHORIZING THE OPERATION OF
Nalco Fresno Facility
Industrial Organic Chemicals

LOCATED AT
Fort Bend County, Texas
Latitude 29° 32' 33" Longitude 95° 26' 56"
Regulated Entity Number: RN101618882

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O3536 Issuance Date: April 9, 2013

[ADVANCE \x 144]For the Commission

Table of Contents

Section **Page**

[TOC \o "1-3" \h \z \t "SOP_Heading1,1,SOP_Heading2,2,SOP_Heading2 + Centered,2,SOP_Heading1 + Centered,1"]

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.

F. Emission units subject to 40 CFR Part 63, Subpart VVVVVV as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1495 which incorporates the 40 CFR Part 63 Subpart by reference.

G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:

(i) Title 30 TAC § 101.352 (relating to General Provisions)

(ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)

(vi) Title 30 TAC § 101.359 (relating to Reporting)

(vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)

(viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the

minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be

considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each

source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

(i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).

5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the following requirements for wastewater drains, junction boxes, lift stations and weirs:

A. Title 30 TAC § 115.142 (relating to Control Requirements)

B. Title 30 TAC § 115.142(1)(A) - (D) (relating to Control Requirements)

C. Title 30 TAC § 115.142(1)(E) and (F) (relating to Control Requirements)

D. Title 30 TAC § 115.145 (relating to Approved Test Methods)

E. Title 30 TAC § 115.146 (relating to Recordkeeping Requirements)

F. Title 30 TAC § 115.148 (relating to Determination of Wastewater Characteristics)

6. The permit holder shall comply with the following requirements of 30 TAC Chapter 117:

A. For boilers, process heaters, and stationary reciprocating engines subject to Subchapter D, Division 1 at minor sources of NO_x:

(i) Title 30 TAC § 117.2010(a), and (c) - (f) (relating to Emission Specifications), for sources subject to mass emissions cap and trade under 30 TAC Chapter 101, Subchapter H

(ii) Title 30 TAC § 117.2030 (relating to Operating Requirements)

(iii) Title 30 TAC § 117.2035 (relating to Monitoring and Testing Requirements)

(iv) Title 30 TAC § 117.2045 (relating to Recordkeeping and Reporting Requirements)

(v) Title 30 TAC § 117.9200 (relating to Compliance Schedule)

7. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

9. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit

listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

14. The permit holder shall comply with the following requirements for Air Quality Standard Permits:

    A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit

    B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit

    C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

15. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

16. The permit holder shall adhere to the provisions in the Compliance Schedule attachment of this permit and submit certified progress reports consistent with the schedule established under 30 TAC § 122.132(e)(4)(C) and including the information specified in 30 TAC § 122.142(e)(2). Those emission units listed in the Compliance Schedule attachment shall adhere with the requirements in the Compliance Schedule attachment until operating fully in compliance with the applicable requirements.

17. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

        (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

            (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

B. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

18. Use of Emission Credits to comply with applicable requirements:

A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) Offsets for Title 30 TAC Chapter 116

B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)

(ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

(iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

19. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

20. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

21. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

    A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

23. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until

notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Schedules

Applicable Requirements Summary

Unit Summary 16

Applicable Requirements Summary 35

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
B-1	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
B-1	Boilers/Steam Generators/Steam Generating Units	N/A	60DC-BOILER1	40 CFR Part 60, Subpart Dc	No changing attributes.
B-103	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
B-103	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
B-104	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
B-104	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
B-1A	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
B-1A	Boilers/Steam Generators/Steam Generating Units	N/A	60Dc-BOILER	40 CFR Part 60, Subpart Dc	No changing attributes.
B-2A	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
B-2A	Boilers/Steam Generators/Steam Generating Units	N/A	60DC-BOILER1	40 CFR Part 60, Subpart Dc	No changing attributes.
DEGREASE	Solvent Degreasing Machines	N/A	115-DEGREASE	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
F-1	Flares	N/A	111-FLARE1	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-1	Emission Points/Stationary Vents/Process Vents	N/A	63VVVVVV-F1	40 CFR Part 63, Subpart VVVVVV	No changing attributes.
F-2	Flares	N/A	111-FLARE1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPFS-100	Loading/Unloading Operations	R100LOAD, R102LOAD, R111LOAD, R114LOAD, R115LOAD	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
GRPFS-100	Loading/Unloading Operations	R100LOAD, R102LOAD, R111LOAD, R114LOAD, R115LOAD	115-LOAD4	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-100	Loading/Unloading Operations	R100LOAD, R102LOAD, R111LOAD, R114LOAD, R115LOAD	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Vapor control system with a

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-200	Loading/Unloading Operations	R101LOAD, R103LOAD, R104LOAD, R105LOAD, R106LOAD	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
GRPFS-200	Loading/Unloading Operations	R101LOAD, R103LOAD, R104LOAD, R105LOAD, R106LOAD	115-LOAD4	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-200	Loading/Unloading Operations	R101LOAD, R103LOAD, R104LOAD, R105LOAD,	115-LOAD5	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		R106LOAD			per day., Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-200	Loading/Unloading Operations	R101LOAD, R103LOAD, R104LOAD, R105LOAD, R106LOAD	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-300	Loading/Unloading Operations	B103LOAD, B104LOAD, R108LOAD, R110LOAD	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
GRPFS-300	Loading/Unloading Operations	B103LOAD, B104LOAD, R108LOAD,	115-LOAD4	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		R110LOAD			greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-300	Loading/Unloading Operations	B103LOAD, B104LOAD, R108LOAD, R110LOAD	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-400	Loading/Unloading Operations	R112LOAD, R113LOAD	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
GRPFS -400	Loading/Unloading Operations	R112LOAD, R113LOAD	115-LOAD4	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
GRPFS-400	Loading/Unloading Operations	R112LOAD, R113LOAD	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
FUG	Fugitive Emission Units	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
FWP-1	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FWP-1	SRIC Engines	N/A	63ZZZZ-ENG1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
FWP-2	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FWP-2	SRIC Engines	N/A	60IIII-01	40 CFR Part 60, Subpart IIII	No changing attributes.
FWP-2	SRIC Engines	N/A	63ZZZZ-ENG2	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
HOH-1	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
HOH-2	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
HOH-3	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
HOH-4	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PPFUG	Fugitive Emission Units	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
PPLOAD	Loading/Unloading Operations	R1LOAD, R2LOAD, R4LOAD, R7LOAD, R8LOAD	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
PPLOAD	Loading/Unloading Operations	R1LOAD, R2LOAD, R4LOAD, R7LOAD, R8LOAD	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading less than 20,000 gallons per day.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
R-1	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-100	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
R-100	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
R-101	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
R-101	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT2	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval.
R-102	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
R-102	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
R-103	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
R-103	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT2	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval.
R-104	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-105	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
R-105	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT2	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval.
R-106	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
R-106	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT2	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval.
R-106	Miscellaneous Units	N/A	63VVVVVV-PV1	40 CFR Part 63, Subpart VVVVVV	No changing requirements.
R106LOAD	Miscellaneous Units	N/A	63VVVVVV-LD1	40 CFR Part 63, Subpart VVVVVV	No changing requirements.
R-106WW	Miscellaneous Units	N/A	63VVVVVV-WW1	40 CFR Part 63, Subpart VVVVVV	No changing requirements.
R-108	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
R-108	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
R-110	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
R-110	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
R-111	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-112	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
R-112	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
R-113	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
R-113	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor combustor not considered to be a flare.
R-114	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT6	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-2	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-4	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-7	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-8	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT3	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-2101	Loading/Unloading Operations	N/A	R5211	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
T-2102	Loading/Unloading Operations	N/A	R5211	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
T-4105	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4106	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4107	Storage Tanks/Vessels	N/A	115-TANK5	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4119	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4128	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4132	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4134	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4135	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4143	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4144	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-4145	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4146	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-4148	Loading/Unloading Operations	N/A	R5211	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
T-7901	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT4	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
T-7902	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT4	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
T-7903	Storage Tanks/Vessels	N/A	115-TANK5	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7904	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7905	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7908	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7909	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7910	Storage Tanks/Vessels	N/A	115-TANK5	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7911	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-7920	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7925	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7926	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7927	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7928	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7929	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7930	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7934	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7935	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7936	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7938	Storage Tanks/Vessels	N/A	115-TANK5	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7939	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7940	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-7941	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7942	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7944	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7947	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7948	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7949	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7950	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7953	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7954	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7955	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7956	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7957	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7958	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-7959	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7960	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7961	Storage Tanks/Vessels	N/A	115-TANK3	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7962	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7963	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7964	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7965	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7967	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7969	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT4	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
T-7970	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT4	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
T-7972	Storage Tanks/Vessels	N/A	115-TANK4	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7973	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
T-7976	Storage Tanks/Vessels	N/A	115-TANK4	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
T-7977	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7978	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7979	Emission Points/Stationary Vents/Process Vents	N/A	115-VENT5	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
T-7981	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7982	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7983	Storage Tanks/Vessels	N/A	115-TANK6	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7984	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7985	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-7986	Storage Tanks/Vessels	N/A	115-TANK2	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
TF13LOAD	Loading/Unloading Operations	N/A	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
TF13LOAD	Loading/Unloading Operations	N/A	115-LOAD4	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Control device other than a

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
TF13LOAD	Loading/Unloading Operations	N/A	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
TF4LOAD	Loading/Unloading Operations	N/A	115-LOAD3	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
TF4LOAD	Loading/Unloading Operations	N/A	115-LOAD4	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Control device other than a

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
TF4LOAD	Loading/Unloading Operations	N/A	115-LOAD6	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = Vapor control system with a flare., Control Options = Vapor control system that maintains a control efficiency of at least 90%., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
TO-1	Emission Points/Stationary Vents/Process Vents	N/A	111-VENT1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
UNLOAD	Loading/Unloading Operations	N/A	115-LOAD1	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
UNLOAD	Loading/Unloading Operations	N/A	115-LOAD2	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = No control device., Control Options = Vapor balance system., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B-1	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
B-1	EU	60DC-BOILER1	SO_2	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
B-1	EU	60DC-BOILER1	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
B-1	EU	60DC-BOILER1	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B-103	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
B-103	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
B-104	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
B-104	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B-1A	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
B-1A	EU	60Dc-BOILER	SO_2	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
B-1A	EU	60Dc-BOILER	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
B-1A	EU	60Dc-BOILER	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B-2A	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
B-2A	EU	60DC-BOILER1	SO_2	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
B-2A	EU	60DC-BOILER1	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
B-2A	EU	60DC-BOILER1	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
DEGREASE	EU	115-DEGREASE	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F) § 115.417(1)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
F-1	EU	111-FLARE1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
F-1	EU	63VVVVVV-F1	112(B) HAPS	40 CFR Part 63, Subpart VVVVVV	§ 63.11495(a) § 63.11495(a)(1) § 63.11495(a)(2) § 63.11495(a)(3) [G]§ 63.11496(a) § 63.11496(a)-Table 2	The owner or operator of a CMPU subject to this subpart, must comply with paragraphs (a)(1) through (5) of §63.11495.	[G]§ 63.11495(a)(3) [G]§ 63.11495(a)(4)	§ 63.11495(a)(5) § 63.11496(a)(1) § 63.11496(a)(2) § 63.11496(a)(3) § 63.11496(a)(4) § 63.11501(a) § 63.11501(c) § 63.11501(c)(1) § 63.11501(c)(1)(i) § 63.11501(c)(1)(iii) [G]§ 63.11501(c)(2)	§ 63.11501(a) § 63.11501(b)(1) [G]§ 63.11501(d)
F-2	EU	111-FLARE1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFS-100	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRPFS-100	EU	115-LOAD4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
GRPFS-100	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFS-200	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRPFS-200	EU	115-LOAD4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
GRPFS-200	EU	115-LOAD5	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFS-200	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
GRPFS-300	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRPFS-300	EU	115-LOAD4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFS-300	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
GRPFS-400	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRPFS-400	EU	115-LOAD4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFS-400	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.			
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet.	§ 115.352(1)(C) § 115.352(1)	No component shall be allowed to have a VOC	§ 115.354(1) § 115.354(11)	§ 115.352(7) § 115.354(13)(D)	[G]§ 115.358(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Refinery & Petrochemicals	§ 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(7)	screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.			
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet.	§ 115.352(1)(A) § 115.352(1)	No flanges or other connectors shall be	§ 115.354(1) § 115.354(10)	§ 115.352(7) § 115.354(10)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Refinery & Petrochemicals	§ 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	or exuding of process fluid based on sight, smell, or sound.			
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		[G]§ 115.356(3)(C) § 115.356(5)	
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(8)	sound.			
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
FWP-1	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
FWP-1	EU	63ZZZZ-ENG1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6604(b) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(a)-Table7.4 § 63.6650(f) [G]§ 63.6650(h)
FWP-2	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FWP-2	EU	60IIII-01	NMHC and NO_x	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with an NMHC+NOx emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
FWP-2	EU	60IIII-01	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
FWP-2	EU	63ZZZZ-ENG2	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
HOH-1	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
HOH-2	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
HOH-3	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						source on which construction was begun after January 31, 1972.			
HOH-4	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains, contacting a process fluid with a TVP less than or equal to 0.044 psia, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(4)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains, contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(4)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B)	No pressure relief valves (gaseous service), contacting a process fluid with a TVP less than or equal to 0.044	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(12)	psia, shall be allowed to have a VOC leak, longer than 15 days after discovery, exceeding the specified VOC concentration.	[G]§ 115.354(7) § 115.354(8) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3)(A) § 115.356(3)(B) § 115.356(4)	
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§115.356(3)(C) of this title.			
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						exempt from the requirements of this division except §115.356(3)(C) of this title.			
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery,	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355 § 115.357(1)	§ 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.			
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet.	§ 115.352(1)(A) § 115.352(1)	No flanges or other connectors shall be	§ 115.354(1) § 115.354(10)	§ 115.352(7) § 115.354(10)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Refinery & Petrochemicals	§ 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	dropping or exuding of process fluid based on sight, smell, or sound.			
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(1) § 115.357(8)	based on sight, smell, or sound.			
PPFUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
PPLOAD	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
PPLOAD	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(2)(A) § 115.212(a)(2) [G]§ 115.212(a)(7) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Any plant, excluding gasoline bulk plants, which loads less than 20,000 gpd of VOC with a true vapor pressure of 0.5 psia or greater is exempt from the requirements of this division, except for the specified requirements.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-1	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-100	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-100	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-101	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-101	EP	115-VENT2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-102	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-102	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-103	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-103	EP	115-VENT2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-104	EP	115-VENT2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-105	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-105	EP	115-VENT2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-106	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-106	EP	115-VENT2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-106	EU	63VVVVVV-PV1	VOC	40 CFR Part 63, Subpart VVVVVV	§ 63.11495(a) § 63.11495(a)(1) § 63.11495(a)(3) § 63.11496 - Table 2 [G]§ 63.11496(a)	The owner or operator of a CMPU subject to this subpart, must comply with paragraphs (a)(1) through (5) of §63.11495.	§ 63.11495(a)(3) [G]§ 63.11495(a)(4) § 63.11501(a)	§ 63.11495(a)(5) § 63.11496(a)(1) § 63.11496(a)(2) § 63.11496(a)(3) § 63.11496(a)(4) § 63.11501(a) § 63.11501(c) § 63.11501(c)(1) § 63.11501(c)(1)(i) § 63.11501(c)(1)(iii) [G]§ 63.11501(c)(2)	[G]§ 63.11501(d) [G]§ 63.11501(b)(1)
R106LOAD	EU	63VVVVVV-LD1	VOC	40 CFR Part 63, Subpart VVVVVV	§ 63.11495(a) [G]§ 63.11495(a)(2)	Owners and operators of a CMPU subject to this subpart, must comply with paragraphs (a)(1) through (5) of §63.11495.	None	§ 63.11501(a) § 63.11501(c) § 63.11501(c)(1) § 63.11501(c)(1)(i)	§ 63.11501(a) [G]§ 63.11501(b)(1) [G]§ 63.11501(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-106WW	EU	63VVVVVV-WW1	VOC	40 CFR Part 63, Subpart VVVVVV	[G]§ 63.11495(a) § 63.11498 - Table 6(2)	The owner or operator of a CMPU subject to this subpart, must comply with paragraphs (a)(1) through (5) of §63.11495.	§ 63.11498(a)(1)	§ 63.11501(a) § 63.11501(c) § 63.11501(c)(1) § 63.11501(c)(1)(vi)	§ 63.11501(a) [G]§ 63.11501(b)(1) [G]§ 63.11501(d)
R-108	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-108	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-110	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-110	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4)	Any SOCMI reactor process or distillation	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Controls	§ 115.127(a)(4)	operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.			
R-111	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-112	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-112	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4)§ 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-113	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-113	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-114	EP	115-VENT6	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-2	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A)[G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
R-4	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-7	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
R-8	EP	115-VENT3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
T-2101	EU	R5211	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	§ 115.212(a)(1)(A)-(C).	[G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)		
T-2102	EU	R5211	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
T-4105	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4106	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4107	EU	115-TANK5	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
T-4119	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4128	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4132	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4134	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-4135	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4143	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4144	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4145	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the requirements of this division.			
T-4146	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-4148	EU	R5211	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
T-7901	EP	115-VENT4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(B) § 60.18	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
T-7902	EP	115-VENT4	VOC	30 TAC Chapter 115, Vent Gas	§ 115.121(a)(1) § 115.122(a)(1)	No person may allow a vent gas stream	[G]§ 115.125 § 115.126(1)	§ 115.126 § 115.126(1)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Controls	§ 115.122(a)(1)(B) § 60.18	containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	§ 115.126(1)(B) § 115.126(2)	§ 115.126(1)(B) § 115.126(2)	
T-7903	EU	115-TANK5	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7904	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7905	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7908	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-7909	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
T-7910	EU	115-TANK5	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						division.			
T-7911	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7920	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7925	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7926	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7927	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the requirements of this division.			
T-7928	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7929	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7930	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7934	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7935	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						1.5 psia is exempt from the requirements of this division.			
T-7936	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7938	EU	115-TANK5	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7939	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7940	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7941	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						vapor pressure less than 1.5 psia is exempt from the requirements of this division.			
T-7942	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7944	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7947	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7948	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7949	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
T-7950	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7953	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7954	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7955	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-7956	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7957	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7958	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7959	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the requirements of this division.			
T-7960	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7961	EU	115-TANK3	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
T-7962	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-7963	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7964	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7965	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7967	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-7969	EP	115-VENT4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(B) § 60.18	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
T-7970	EP	115-VENT4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(B) § 60.18	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
T-7972	EU	115-TANK4	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
T-7973	EP	115-VENT1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(A) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
T-7976	EU	115-TANK4	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
T-7977	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7978	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
T-7979	EP	115-VENT5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(1) § 115.122(a)(1) § 115.122(a)(1)(C)	No person may allow a vent gas stream containing VOC to be emitted from any process vent, unless the vent gas stream is burned properly in accordance with §115.122(a)(1) of this title.	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
T-7981	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7982	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7983	EU	115-TANK6	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(A) § 115.112(e)(3)(A)(i)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
T-7984	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7985	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
T-7986	EU	115-TANK2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
TF13LOAD	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						as specified.			
TF13LOAD	EU	115-LOAD4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the following methods.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
TF13LOAD	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure greater than or equal to 0.5 psia must be controlled by one of the specified methods.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
TF4LOAD	EU	115-LOAD3	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						as specified.			
TF4LOAD	EU	115-LOAD4	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the following methods.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9) ** See Periodic Monitoring Summary	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
TF4LOAD	EU	115-LOAD6	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C) § 60.18	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure greater than or equal to 0.5 psia must be controlled by one of the specified methods.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4) § 115.215(9) § 115.216(1) § 115.216(1)(B)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
TO-1	EP	111-VENT1	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
UNLOAD	EU	115-LOAD1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
UNLOAD	EU	115-LOAD2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None

Additional Monitoring Requirements

Periodic Monitoring Summary 99

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B-1A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B-2A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: DEGREASE	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: 115-DEGREASE
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data that indicates the cold cleaner is not in compliance with the applicable requirements of 115.412(1)(A)-(F) shall be reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPFS-100	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPFS-200	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPFS-200	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD5
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPFS-200	
Control Device ID No.: S79-2A,B,C	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD5
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Daily	
Averaging Period: N/A	
Deviation Limit: First canister not replaced or event not recorded when breakthrough occurs. Also when first canister concentration exceeds 500 ppm.	
Periodic Monitoring Text: Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration at the outlet of the initial canister but before the inlet to the second or final polishing canister. The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specification or other written procedures. If the maximum reading after the outlet of the initial canister is above the maximum limit, that canister shall be replaced and the event recorded before the next VOC reading is taken.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPFS-300	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPFS-400	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: FWP-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions greater than 20% opacity.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: FWP-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions greater than 20% opacity.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: HOH-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: HOH-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: HOH-3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: HOH-4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-4134	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-4134	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: The facility does not maintain a record of tank construction specifications that show a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7908	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7908	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: At the end of each unloading operation	
Averaging Period: n/a	
Deviation Limit: The liquid volume in the tank falls below 294 gallons.	
Periodic Monitoring Text: Regardless of the location of the fill pipe, the fill pipe must be submerged at all times. Establish the volume of liquid at the depth of the highest point of the fill pipe. Record the volume of liquid loaded and unloaded so that the storage vessel liquid volume is known. It shall be considered and reported as a deviation anytime the liquid volume falls below the liquid volume at the fill pipe.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7909	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7909	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: The facility does not maintain a record of tank construction specifications that show a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7955	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: At the end of each unloading operation	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation any time the liquid volume in the tank falls below 423 gallons.	
Periodic Monitoring Text: Regardless of the location of the fill pipe, the fill pipe must be submerged at all times. Establish the volume of liquid at the depth of the highest point of the fill pipe. Record the volume of liquid loaded and unloaded so that the storage vessel liquid volume is known. It shall be considered and reported as a deviation anytime the liquid volume falls below the liquid volume at the fill pipe.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7955	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if the tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7961	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: Deviation occurs if repairs to the fill pipe are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7961	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: Once per day	
Averaging Period: n/a	
Deviation Limit: Deviation occurs when the liquid level falls below the bottom of the open end of the fill pipe.	
Periodic Monitoring Text: Regardless of the location of the fill pipe, the fill pipe must be submerged at all times. Monitor and record the depth of the liquid using an automated/remote sounding device or liquid level sensing alarm/monitor. It shall be considered and reported as a deviation any time the liquid level falls below the fill pipe level.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7962	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: T-7962	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: The facility does not maintain a record of tank construction specifications that show a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: TF13LOAD	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: TF4LOAD	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: TO-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
B-103	N/A	40 CFR Part 63, Subpart VVVVVV	Blender does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
B-104	N/A	40 CFR Part 63, Subpart VVVVVV	Blender does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
FWP-1	N/A	40 CFR Part 60, Subpart JJJJ	Engine is not a stationary spark ignition ICE.
FWP-2	N/A	40 CFR Part 60, Subpart JJJJ	Engine is not a stationary spark ignition ICE.
R-1	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-100	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-102	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-103	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-104	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-105	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-108	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-110	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
R-111	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-112	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-113	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-114	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-2	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-4	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-7	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
R-8	N/A	40 CFR Part 63, Subpart VVVVVV	Reactor does not use or produce a HAP that is listed in Table 1 of MACT VVVVVV.
T-4101	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-4101	N/A	40 CFR Part 60, Subpart K	Tank capacity is less than 40,000 gallons.
T-4101	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4105	N/A	40 CFR Part 60, Subpart K	Tank capacity is less than 40,000 gallons.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-4105	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4106	N/A	40 CFR Part 60, Subpart K	Tank capacity is less than 40,000 gallons.
T-4106	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4107	N/A	40 CFR Part 60, Subpart K	Tank capacity is less than 40,000 gallons.
T-4107	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4118	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-4118	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.
T-4118	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4119	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-4119	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4128	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-4128	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4132	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-4132	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			of MACT VVVVVV.
T-4134	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-4134	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4135	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-4135	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4137	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-4137	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.
T-4137	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4142	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-4142	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.
T-4142	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4143	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-4143	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4144	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-4144	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4145	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-4145	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-4146	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-4146	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7903	N/A	40 CFR Part 60, Subpart Ka	Tank capacity is less than 40,000 gallons.
T-7903	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7904	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7904	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7905	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7905	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7906	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-7906	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.
T-7906	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			of MACT VVVVVV.
T-7907	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-7907	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.
T-7907	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7908	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7908	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7909	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7909	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7910	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7910	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7911	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7911	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7913	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-7913	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-7913	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7914	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-7914	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a volatile organic liquid.
T-7914	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7920	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7920	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7925	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7925	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7926	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7926	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7927	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7927	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7928	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7928	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			of MACT VVVVVV.
T-7929	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7929	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7930	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7930	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7934	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7934	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7935	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7935	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7936	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7936	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7938	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7938	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7939	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-7939	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7940	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7940	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7941	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7941	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7942	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7942	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7944	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7944	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7947	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7947	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7948	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7948	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7949	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-7949	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7950	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7950	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7953	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7953	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7954	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7954	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7955	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7955	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7956	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7956	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7957	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7957	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7958	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-7958	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7959	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7959	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7960	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7960	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7961	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7961	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7962	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7962	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7963	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7963	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7964	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7964	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7965	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-7965	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7967	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7967	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7968	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-7968	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7968	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7969	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7969	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7970	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7970	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7972	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7972	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7974	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
T-7974	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7975	N/A	30 TAC Chapter 115, Storage of VOCs	Tank does not store a VOC as defined by 101.1(115).
T-7975	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 10,000 gallons.
T-7975	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7976	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7976	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7977	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7977	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7978	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7978	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7981	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7981	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7982	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7982	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			of MACT VVVVVV.
T-7983	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7983	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7984	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7984	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7985	N/A	40 CFR Part 60, Subpart Kb	Tank does not store a VOL with TVP >2.2 psia.
T-7985	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.
T-7986	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 20,000 gallons.
T-7986	N/A	40 CFR Part 63, Subpart VVVVVV	Tank does not store a HAP that is listed in Table 1 of MACT VVVVVV.

New Source Review Authorization References

New Source Review Authorization References 146

New Source Review Authorization References by Emission Unit 147

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 103687	Issuance Date: 07/18/2012
Authorization No.: 111189	Issuance Date: 08/08/2013
Authorization No.: 138254	Issuance Date: 03/01/2016
Authorization No.: 139946	Issuance Date: 05/27/2016
Authorization No.: 4005	Issuance Date: 02/06/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.124	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
79S-2A,B,C	SCRUBBER/CAS SYSTEM 79S-2A,B,C	4005
B-103	BLENDING VESSEL 103	4005
B103LOAD	BLENDING VESSEL B-103 LOADING	4005
B-104	BLENDING VESSEL 104	4005
B104LOAD	BLENDING VESSEL B-104 LOADING	4005
B-1A	NORTH PLANT BOILER 1A	106.183/09/04/2000
B-1	PLANT BOILER	4005
B-2A	SOUTH PLANT BOILER 2A	106.183/09/04/2000
CWT-2	PLANT 1 COOLING TOWER	4005
CWT-3	PLANT 2/3 COOLING TOWER	4005
CWT-4	PLANT 4 COOLING TOWER	4005
CWT-5	PLANT 1 COOLING TOWER	4005
DEGREASE	SOLVENT DEGREASING	106.454/11/01/2001
F-1	FLARE F-1	4005
F-2	FLARE F-2	4005
FUG	PLANT WIDE FUGITIVES	4005
FWP-1	FIRE WATER PUMP A	4005
FWP-2	FIRE WATER PUMP B	4005
HOH-1	HOT OIL HEATER 1	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
HOH-2	HOT OIL HEATER 2	4005
HOH-3	HOT OIL HEATER 3	4005
HOH-4	HOT OIL HEATER 4	4005
PPFUG	PILOT PLANT FUGITIVES	106.124/09/04/2000
PPS-1	PILOT PLANT SCRUBBER S-1	106.124/09/04/2000
PPS-8	PILOT PLANT SCRUBBER S-8	106.124/09/04/2000
R100LOAD	REACTOR R-100 LOADING	4005
R-100	REACTOR 100	4005
R101LOAD	REACTOR R-101 LOADING	4005
R-101	REACTOR 101	4005
R102LOAD	REACTOR R-102 LOADING	4005
R-102	REACTOR 102	4005
R103LOAD	REACTOR R-103 LOADING	4005
R-103	REACTOR 103	4005
R104LOAD	REACTOR R-104 LOADING	4005
R-104	REACTOR 104	4005
R105LOAD	REACTOR R-105 LOADING	4005
R-105	REACTOR 105	4005
R106LOAD	REACTOR R-106 LOADING	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
R-106	REACTOR 106	4005
R-106WW	REACTOR 106 WASTEWATER STREAM	4005
R108LOAD	REACTOR R-108 LOADING	4005
R-108	REACTOR 108	4005
R110LOAD	REACTOR R-110 LOADING	4005
R-110	REACTOR 110	4005
R111LOAD	REACTOR R-111 LOADING	4005
R-111	REACTOR 111	4005
R112LOAD	REACTOR R-112 LOADING	4005
R-112	REACTOR 112	4005
R113LOAD	REACTOR R-113 LOADING	4005
R-113	REACTOR 113	4005
R114LOAD	REACTOR R-114 LOADING	4005
R-114	REACTOR 114	4005
R115LOAD	REACTOR R-115 LOADING	4005
R1LOAD	REACTOR R-1 LOADING	106.124/09/04/2000
R-1	REACTOR R-1	106.124/09/04/2000
R2LOAD	REACTOR R-2 LOADING	106.124/09/04/2000
R-2	REACTOR R-2	106.124/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
R4LOAD	REACTOR R-4 LOADING	106.124/09/04/2000
R-4	REACTOR R-4	106.124/09/04/2000
R7LOAD	REACTOR R-7 LOADING	106.124/09/04/2000
R-7	REACTOR R-7	106.124/09/04/2000
R8LOAD	REACTOR R-8 LOADING	106.124/09/04/2000
R-8	REACTOR R-8	106.124/09/04/2000
S-114-3	SCRUBBER S-114-3	4005
S1	SCRUBBER #1	4005
S2	SCRUBBER #2	4005
S-7944	SCRUBBER S-7944	4005
S-7951	SCRUBBER S-7951	4005
S-7954	SCRUBBER S-7954	4005
SURFCOAT	SURFACE COATING	106.433/09/04/2000
T-2101	DAY TANK	106.476/09/04/2000
T-2102	DAY TANK	106.476/09/04/2000
T-4101	TANK 4101	4005
T-4105	TANK 4105	4005
T-4106	TANK 4106	4005
T-4107	TANK 4107	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-4118	TANK 4118	4005
T-4119	TANK 4119	4005
T-4128	TANK 4128	4005
T-4132	TANK 4132	4005
T-4134	TANK 4134	4005
T-4135	TANK 4135	4005
T-4137	TANK 4137	4005
T-4142	TANK 4142	4005
T-4143	TANK 4143	4005
T-4144	TANK 4144	4005
T-4145	TANK 4145	4005
T-4146	TANK 4146	4005
T-4148	DAY TANK	106.476/09/04/2000
T-7901	TANK 7901	4005
T-7902	TANK 7902	4005
T-7903	TANK 7903	4005
T-7904	TANK 7904	4005
T-7905	TANK 7905	4005
T-7906	TANK 7906	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-7907	TANK 7907	4005
T-7908	TANK 7908	4005
T-7909	TANK 7909	4005
T-7910	TANK 7910	4005
T-7911	TANK 7911	4005
T-7913	TANK 7913	4005
T-7914	TANK 7914	4005
T-7920	TANK 7920	4005
T-7925	TANK 7925	4005
T-7926	TANK 7926	4005
T-7927	TANK 7927	4005
T-7928	TANK 7928	4005
T-7929	TANK 7929	4005
T-7930	TANK 7930	4005
T-7934	TANK 7934	4005
T-7935	TANK 7935	4005
T-7936	TANK 7936	4005
T-7938	TANK 7938	4005
T-7939	TANK 7939	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-7940	TANK 7940	4005
T-7941	TANK 7941	4005
T-7942	TANK 7942	4005
T-7944	TANK 7944	4005
T-7947	TANK 7947	4005
T-7948	TANK 7948	4005
T-7949	TANK 7949	4005
T-7950	TANK 7950	4005
T-7953	TANK 7953	4005
T-7954	TANK 7954	4005
T-7955	TANK 7955	4005
T-7956	TANK 7956	4005
T-7957	TANK 7957	4005
T-7958	TANK 7958	4005
T-7959	TANK 7959	4005
T-7960	TANK 7960	4005
T-7961	TANK 7961	4005
T-7962	TANK 7962	4005
T-7963	TANK 7963	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-7964	TANK 7964	4005
T-7965	TANK 7965	4005
T-7967	TANK 7967	4005
T-7968	TANK 7968	4005
T-7969	TANK 7969	4005
T-7970	TANK 7970	4005
T-7972	TANK 7972	4005
T-7973	MIXING VESSEL T-7973 (V-101-7)	4005
T-7974	TANK 7974	4005
T-7975	TANK 7975	4005
T-7976	TANK 7976	4005
T-7977	TANK 7977	4005
T-7978	TANK 7978	4005
T-7979	TANK 7979	4005
T-7981	TANK 7981	4005
T-7982	TANK 7982	4005
T-7983	TANK 7983	4005
T-7984	TANK 7984	4005
T-7985	TANK 7985	4005

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-7986	TANK 7986	4005
T-7	TANK T-7	106.124/09/04/2000
T-8	TANK T-8	106.124/09/04/2000
T-9	TANK T-9	106.124/09/04/2000
TF13LOAD	TANK FARM #13 LOADING	4005
TF4LOAD	TANK FARM #4 LOADING	4005
TO-1	THERMAL OXIDIZER TO-1	4005
UNLOAD	TANK TRUCK UNLOADING	4005

Schedules

Compliance Schedule 157

Compliance Schedule

[SEQ CHAPTER \h \r 1]A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	**SOP Index No.**	**Pollutant**	**Applicable Requirement**	
			Citation	**Text Description**
T-4105		VOC	NSR 4005	Permit Special Condition 5 Control Requirement

2. Compliance Status Assessment Method and Records Location		
Compliance Status Assessment Method		**Location of Records/Documentation**
Citation	**Text Description**	
NSR 4005	Tank is required to be controlled by a thermal oxidizer.	Tank 4105 equipment record is kept at the Fresno Plant.

3. Non-compliance Situation Description
Failed to have proper controls on Tank 4105.
4. Corrective Action Plan Description
Connect Tank 4105 to the thermal oxidizer (EPN TO-1).

5. List of Activities/Milestones to Implement the Corrective Action Plan	
1	Obtain equipment needed to connect Tank 4105 to the thermal oxidizer (EPN TO-1) control system. (03/31/2013)
2	Connect Tank 4105 to the thermal oxidizer control system. (06/30/2013)
3	Complete by July 1, 2013

[SEQ CHAPTER \h \r 1]6. Previously Submitted Compliance Plan(s)	**[SEQ CHAPTER \h \r 1]Type of Action**	**[SEQ CHAPTER \h \r 1]Date Submitted**
	N/A	

[SEQ CHAPTER \h \r 1]7. Progress Report Submission Schedule	Initial Report January 2013 And Every Six (6) Months Until Completion.

Appendix A

Acronym List 159

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Nalco Company LLC

Site Name: Nalco Fresno Facility
Physical Location: 3130 FM 521 Road
Nearest City: Fresno
County: Fort Bend

Permit Number: O3536
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: May 12, 2017

Operating Permit
Basis of Determination

Description of Revisions
This revision renames groups PLT1LOAD, PLT2LOAD, PLT3LOAD and PLT4LOAD to GRPFS-100, GRPFS-200, GRPFS-300 and GRPFS-400 respectively. New holding tanks (Day Tanks) units T-2101, T-2102 and T-4148 were added to the permit with 30 TAC 115, Loading and Unloading VOC, applicabilities.

Permit Area Process Description
Nalco Company (Nalco) Fresno Plant is a batch operation chemical plant that produces specialty chemicals with the use of reactors, blending vessels, storage tanks and support utilities which currently are authorized by NSR Air Permit No. 4005, and various Permits by Rule (PBRs). The Fresno Plant is divided into separate operating areas, consisting of four plants that share common auxiliary equipment and utilities.

Products are formulated in 14 different reactors and 2 blenders, ranging in sizes from 500 to 6,500 gallons. Bulk, drummed and/or solid raw materials are typically charged into the reactors and blenders. Vent gases are directed to either (1) a control system consisting of a caustic scrubber to remove acid gasses at 99% efficiency followed by the Thermal Oxidizer (EPN TO-1) to control Volatile Organic Compound (VOC) emissions at 99.9%, (2) one of two scrubbers (EPNs S1, S2 and 79S-2A,B,C) with a 99% destruction efficiency, or (3) Flare F-2 (EPN F-2). These raw materials will then be reacted by mixing and heating as necessary. The reactor and blender vents may or may not be opened during this step. A nitrogen purge may be applied during or after the reaction step for certain products (i.e. ethylene oxide and propylene oxide) and will vent to Flare F-1 (EPN F-1). The products will then be cooled as necessary and will either be loaded directly into tank trucks, drums/totes/containers, or transferred to holding tanks, bulk storage or transferred to other reactors acting as holding vessels. Emissions resulting from tank truck loading and packaging operations are controlled by the Thermal Oxidizer for Plants 1, 3 and 4 while emissions from Plant 2 will be routed to a scrubber system (EPN 79S-2A, B, C).

Storage tanks at the Fresno Plant are used to store raw materials, intermediates and finished products associated with the reactors and blenders. The tanks receive raw materials from tank trucks and intermediate and finished products from reactors and blenders. A small portion of the storage tanks have their own individual scrubbers to control emissions while a few others may be routed to Flare F-1 or the Thermal Oxidizer. From these bulk storage tanks, raw materials can be transferred into reactors or blenders while finished products can be loaded out into tank trucks or drums/totes/containers. Emission resulting from these loading and packaging operations will be routed to the Thermal Oxidizer or appropriate scrubber system.

There is also a pilot plant located at the Fresno Plant. The pilot plant consists of five reactors, three pressurized storage tanks and associated tempered oil units for heating and cooling. Product is directly loaded from the reactors into drums. The reactors are routed to either scrubbers PPS-1 or PPS-8.

Nalco is operating Fresno Energy which is an electric energy generating facility that is located nearby the Fresno Plant and is under common control. Fresno Energy includes a Caterpillar G3520C engine that is driving an electric generator to produce 1.47 MW of electrical power. This electrical power is supplied to the power grid and is not used by the Nalco facilities at this site. The engine is fueled with landfill gas.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide

requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).

11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled “Basis of Determination.” Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of

units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
R-106	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-PV1	Unit Type = Emission Unit CMPU subject to this 40 CFR Part 63, Subpart VVVVVV	The citations for this rule were determined from the basis of determination provided (i.e. the unit attributes that the applicant should provide when no form exists) and an analysis of the rule text.
R106LOAD	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-LD1	Unit Type = Emission Unit CMPU subject to this 40 CFR Part 63, Subpart VVVVVV	The citations for this rule were determined from the basis of determination provided (i.e. the unit attributes that the applicant should provide when no form exists) and an analysis of the rule text.
R-106WW	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-WW1	Unit Type = Emission Unit CMPU subject to this 40 CFR Part 63, Subpart VVVVVV	The citations for this rule were determined from the basis of determination provided (i.e. the unit attributes that the applicant should provide when no form exists) and an analysis of the rule text.
FWP-1	40 CFR Part 60, Subpart IIII	60IIII-02	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005. Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 368 KW. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Service = CI ICE is a fire-pump engine, an emergency engine certified to National Fire Protection Association requirements. Commencing = CI ICE that is commencing new construction. Manufacture Date = Date of manufacture was on or prior to 07/01/2006.	
FWP-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-ENG1	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP. Performance Test = No previous performance test used, a performance test is conducted to demonstrate initial compliance Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Control Technique = Control technique other than an oxidation catalyst Different Schedule = Schedule specified in Subpart ZZZZ for submission of reports applies.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Operating Limits = Using the control techniques approved in Subpart ZZZZ Displacement = The stationary CI RICE has a displacement less than 30 liters per cylinder and uses diesel fuel. Monitoring System = Monitoring system other than a CPMS or CEMS Service Type = Emergency use where the RICE operates or is contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or that operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine	
FWP-2	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005. Diesel = Diesel fuel is used. Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 368 KW. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Displacement = Displacement is less than 10 liters per cylinder. Service = CI ICE is a fire-pump engine, an emergency engine certified to National Fire Protection Association requirements. Standards = The emergency CI ICE does not meet the standards applicable to non-emergency engines. Commencing = CI ICE that is commencing new construction. Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions. Manufacture Date = Date of manufacture is after 07/01/2006. Model Year = CI ICE was manufactured in model year 2010. Options = The CI ICE rated speed is less than 2650 RPMs.	
FWP-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-ENG2	HAP Source = Any stationary source of hazardous air pollutants that is not a major source as defined in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
T-4101	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-4101	40 CFR Part 60, Subpart K	60K-TANK1	Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-4105	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4105	40 CFR Part 60, Subpart K	60K-TANK1	Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less	
T-4106	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4106	40 CFR Part 60, Subpart K	60K-TANK1	Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less	
T-4107	30 TAC Chapter 115, Storage of VOCs	115-TANK5	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4107	40 CFR Part 60, Subpart K	60K-TANK1	Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less	
T-4118	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-4118	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-4119	30 TAC Chapter 115, Storage of	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	VOCs		documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4119	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-4128	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4128	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-4132	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4132	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-4134	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-4134	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-4135	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4135	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-4137	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-4137	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-4142	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-4142	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-4143	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4143	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-4144	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4144	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-4145	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4145	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-4146	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-4146	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7903	30 TAC Chapter 115, Storage of VOCs	115-TANK5	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7903	40 CFR Part 60, Subpart Ka	60Ka-TANK1	Product Stored = Stored product other than a petroleum liquid Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less	
T-7904	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7904	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7905	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7905	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7906	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7906	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-7907	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7907	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-7908	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7908	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7909	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7909	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7910	30 TAC Chapter 115, Storage of VOCs	115-TANK5	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7910	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7911	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7911	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			19,800 gallons (75,000 liters)	
T-7913	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7913	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-7914	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7914	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-7920	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7920	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7925	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7925	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7926	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7926	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7927	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7927	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7928	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7928	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7929	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7929	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7930	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7930	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7934	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7934	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7935	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7935	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7936	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-7936	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7938	30 TAC Chapter 115, Storage of VOCs	115-TANK5	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7938	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7939	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7939	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7940	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7940	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7941	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7941	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7942	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7942	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7944	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7944	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7947	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7947	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-7948	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7948	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7949	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7949	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7950	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7950	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7953	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7953	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7954	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7954	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7955	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7955	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7956	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7956	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7957	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7957	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7958	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7958	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7959	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7959	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7960	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7960	40 CFR Part 60,	60Kb-TANK3	Product Stored = Volatile organic liquid	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Subpart Kb		Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7961	30 TAC Chapter 115, Storage of VOCs	115-TANK3	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7961	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7962	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7962	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7963	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7963	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7964	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7964	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7965	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7965	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
T-7967	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Other control device	
T-7967	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7968	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7968	40 CFR Part 60, Subpart Kb	60Kb-TANK1	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T-7972	30 TAC Chapter 115, Storage of VOCs	115-TANK4	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
T-7972	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7974	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7975	30 TAC Chapter 115, Storage of VOCs	115-TANK1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC	
T-7975	40 CFR Part 60, Subpart Kb	60Kb-TANK2	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T-7976	30 TAC Chapter 115, Storage of VOCs	115-TANK4	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons	
T-7976	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7977	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
T-7977	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7978	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7978	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7981	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7981	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7982	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7982	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7983	30 TAC Chapter 115, Storage of VOCs	115-TANK6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Other control device	
T-7983	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7984	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7984	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7985	30 TAC Chapter 115, Storage of VOCs	115-TANK2	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7985	40 CFR Part 60, Subpart Kb	60Kb-TANK4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T-7986	30 TAC Chapter	115-TANK2	Today's Date = Today's date is March 1, 2013 or later.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
T-7986	40 CFR Part 60, Subpart Kb	60Kb-TANK3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)	
FS-100	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
FS-100	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD4	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-100	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-200	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
FS-200	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD4	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-200	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD5	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-200	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant,	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-300	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
FS-300	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD4	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-300	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-400	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
FS-400	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD4	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
FS-400	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
PPLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant,	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
PPLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading less than 20,000 gallons per day.	
T-2101	30 TAC Chapter 115, Loading and Unloading of VOC	R5211	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
T-2102	30 TAC Chapter 115, Loading and Unloading of VOC	R5211	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
T-4148	30 TAC Chapter 115, Loading and Unloading of VOC	R5211	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
TF13LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
TF13LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD4	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
TF13LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
TF4LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
TF4LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD4	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
TF4LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD6	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.	
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	115-LOAD2	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor balance system.	
B-1	40 CFR Part 60, Subpart Dc	60DC-BOILER1	Construction/Modification Date = After February 28, 2005. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW). Technology Type = Other conventional technology. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF.	
B-1A	40 CFR Part 60, Subpart Dc	60Dc-BOILER	Construction/Modification Date = After February 28, 2005. PM Monitoring Type = No particulate monitoring.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW). Technology Type = Other conventional technology. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF.	
B-2A	40 CFR Part 60, Subpart Dc	60DC-BOILER1	Construction/Modification Date = After February 28, 2005. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than 10 MMBtu/hr (2.9 MW) but less than 30 MMBtu/hr (8.7 MW). Technology Type = Other conventional technology. D-Series Fuel Type = Natural gas. D-Series Fuel Type = Other fuel. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF.	
F-1	30 TAC Chapter 111, Visible Emissions	111-FLARE1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.	
F-1	40 CFR Part 60, Subpart A	60A-FLARE1	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.	
F-2	30 TAC Chapter 111, Visible Emissions	111-FLARE1	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.	
F-2	40 CFR Part 60,	60A-FLARE1	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Subpart A			
FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device. Agitators = The fugitive unit contains agitators. Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358. Compressor Seals = The fugitive unit does not contain compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = Components in the fugitive unit contact process fluids that contain less than 10% VOC by weight and process fluids that contains VOC at 10%, or greater, by weight. Complying wIth § 115.352(1) = Valves are complying with § 115.352(1). Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1). Complying WIth § 115.352(1) = Agitators are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC > 0.044 psia at 68° F = Agitators contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.	
PPFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device. Agitators = The fugitive unit contains agitators. Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358. Compressor Seals = The fugitive unit does not contain compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Instrumentation Systems = The fugitive unit does not have instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit does not have sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = Components in the fugitive unit contact process fluids that contain less than 10% VOC by weight and process fluids that contains VOC at 10%, or greater, by weight.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Complying wIth § 115.352(1) = Valves are complying with § 115.352(1). Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1). Complying WIth § 115.352(1) = Agitators are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC > 0.044 psia at 68° F = Agitators contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.	
R106FUG	40 CFR Part 60, Subpart VV	60VV-FUG1	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.	
B-1	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
B-103	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
B-103	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
B-104	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
B-104	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
B-1A	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
B-2A	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
F-1	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-F1	TRE Index Value = TRE index is greater than 1 but less than or equal to 4. Recovery Device = No recovery device is used to maintain the TRE index value above 1 and less than or equal to 4.	The rule citations were determined from an analysis of the rule text and the basis of determination.
FWP-1	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
FWP-2	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
HOH-1	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of §	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
HOH-2	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
HOH-3	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
HOH-4	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
R-1	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-100	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-100	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-101	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-101	30 TAC Chapter 115, Vent Gas Controls	115-VENT2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-102	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-102	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-103	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-103	30 TAC Chapter 115, Vent Gas	115-VENT2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Controls		Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-104	30 TAC Chapter 115, Vent Gas Controls	115-VENT2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-105	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-105	30 TAC Chapter 115, Vent Gas Controls	115-VENT2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			operated in a batch mode.	
R-106	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-106	30 TAC Chapter 115, Vent Gas Controls	115-VENT2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-108	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-108	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-110	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-110	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-111	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-112	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-112	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-113	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-113	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-114	30 TAC Chapter 115, Vent Gas Controls	115-VENT6	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor combustor not considered to be a flare. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-2	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-4	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-7	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
R-8	30 TAC Chapter 115, Vent Gas Controls	115-VENT3	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
T-7901	30 TAC Chapter 115, Vent Gas Controls	115-VENT4	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
T-7902	30 TAC Chapter 115, Vent Gas Controls	115-VENT4	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
T-7969	30 TAC Chapter 115, Vent Gas Controls	115-VENT4	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
T-7970	30 TAC Chapter 115, Vent Gas Controls	115-VENT4	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
T-7973	30 TAC Chapter 115, Vent Gas Controls	115-VENT1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10, designed and operated in a batch mode.	
T-7979	30 TAC Chapter 115, Vent Gas Controls	115-VENT5	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
TO-1	30 TAC Chapter 111, Visible Emissions	111-VENT1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of §	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
DEGREASE	30 TAC Chapter 115, Degreasing Processes	115-DEGREASE	Solvent Degreasing Machine Type = Cold solvent cleaning machine. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested. Solvent Sprayed = No solvent is sprayed. Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit. Solvent Heated = The solvent is not heated to a temperature greater than 120° F. Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine. Drainage Area = Area is less than 16 square inches. Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.	

* - The "unit attributes" or operating conditions that determine what requirements apply
** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 103687	Issuance Date: 07/18/2012
Authorization No.: 111189	Issuance Date: 08/08/2013
Authorization No.: 138254	Issuance Date: 03/01/2016
Authorization No.: 139946	Issuance Date: 05/27/2016
Authorization No.: 4005	Issuance Date: 08/16/2010
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.124	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in

the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: B-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: B-1A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: B-2A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: DEGREASE	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: 115-DEGREASE
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data that indicates the cold cleaner is not in compliance with the applicable requirements of 115.412(1)(A)-(F) shall be reported as a deviation.	
Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.	

Unit/Group/Process Information	
ID No.: FS-100	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: FS-200	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: FS-200	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD5
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: FS-200	
Control Device ID No.: S79-2A,B,C	Control Device Type: Carbon Adsorption System (Non-Regenerative)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD5
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Daily	
Averaging Period: N/A	
Deviation Limit: First canister not replaced or event not recorded when breakthrough occurs. Also when first canister concentration exceeds 500 ppm.	
Basis of monitoring: A common way to monitor a non-regenerative carbon adsorption system is by measuring the outlet VOC concentration with a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. An increase in VOC concentration demonstrates when the carbon canister needs to be replaced. This indicator is consistent with the EPA "CAM Technical Guidance Document" (August 1998) and "Periodic Monitoring Technical Reference Guidance Document" (April 1999). Outlet VOC concentration has been used as an indicator of VOC emissions in many federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: FS-300	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: FS-400	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: FWP-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions greater than 20% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: FWP-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions greater than 20% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: HOH-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: HOH-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: HOH-3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: HOH-4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Opacity exceeds 20%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: T-4134	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-4134	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: The facility does not maintain a record of tank construction specifications that show a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7908	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7908	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: At the end of each unloading operation	
Averaging Period: n/a	
Deviation Limit: The liquid volume in the tank falls below 294 gallons.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7909	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7909	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: The facility does not maintain a record of tank construction specifications that show a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7955	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: At the end of each unloading operation	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation any time the liquid volume in the tank falls below 423 gallons.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7955	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered and reported as a deviation if the tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7961	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: Deviation occurs if repairs to the fill pipe are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7961	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Liquid Level	
Minimum Frequency: Once per day	
Averaging Period: n/a	
Deviation Limit: Deviation occurs when the liquid level falls below the bottom of the open end of the fill pipe.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7962	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: The tank is not inspected or if repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-7962	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: 115-TANK6
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: The facility does not maintain a record of tank construction specifications that show a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: TF13LOAD	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: TF4LOAD	
Control Device ID No.: TO-1	Control Device Type: Vapor Combustor
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: 115-LOAD4
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: Exhaust gas temperature falls below 1400 degrees F.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: TO-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: 111-VENT1
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceeding 20% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
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Message

From: Donna Williams [donna.williams@tceq.texas.gov]
Sent: 3/27/2017 1:31:44 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Mike Wilson [mike.wilson@tceq.texas.gov]; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Tan Nguyen [Tan.Nguyen@tceq.texas.gov]; Alfredo Mendoza [alfredo.mendoza@tceq.texas.gov]
Subject: Texas Notification Report
Attachments: EPA_20170327.rtf; O1704_CITY OF FORT WORTH_SOP.docx; O1704_CITY OF FORT WORTH_SOB.docx; O2030_UNION CARBIDE CORPORATION_SOP.docx; O2030_UNION CARBIDE CORPORATION_SOB.docx; O2166_PHILLIPS 66 COMPANY_SOB.docx; O2166_PHILLIPS 66 COMPANY_SOP.docx; O35_VICTORIA WLE LP_SOB.docx; O35_VICTORIA WLE LP_SOP.pdf; O3645_ONEOK HYDROCARBON LP_SOP.docx; O3645_ONEOK HYDROCARBON LP_SOB.docx; O3747_WTG GAS PROCESSING LP_SOB.docx; O3747_WTG GAS PROCESSING LP_SOP.docx; O615_TARGA DOWNSTREAM LLC_SOB.docx; O615_TARGA DOWNSTREAM LLC_SOP.docx

Minor Revision Projects:
O35 - VICTORIA WLE LP
O3645 - ONEOK HYDROCARBON LP
O3747 - WTG GAS PROCESSING LP
O615 - TARGA DOWNSTREAM LLC

Renewal Projects:
O1704 - CITY OF FORT WORTH
O2030 - UNION CARBIDE CORPORATION
O2166 - PHILLIPS 66 COMPANY

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Union Carbide Corporation

AUTHORIZING THE OPERATION OF
UCC Seadrift Operations
Ethylene Oxide / Glycol
Industrial Organic Chemicals

LOCATED AT
Calhoun County, Texas
Latitude 28° 30' 59" Longitude 96° 46' 5"
Regulated Entity Number: RN102181526

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O2030 Issuance Date: _____

_____

[ADVANCE \x 144]For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

   A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

   B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

   C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subparts F, G, H, and DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §§ 113.110, 113.120, 113.130, and 113.1130, respectively, which incorporates the 40 CFR Part 63 Subpart by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed either before or after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(c)(1).

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

   A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

   B. Title 40 CFR § 60.8 (relating to Performance Tests)

   C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

   D. Title 40 CFR § 60.12 (relating to Circumvention)

   E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

   F. Title 40 CFR § 60.14 (relating to Modification)

   G. Title 40 CFR § 60.15 (relating to Reconstruction)

   H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

7. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

8. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General)

   B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

   C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

9. For Group 1 wastewater streams the permit holder shall comply with the following requirements 40 CFR § 63.138 (relating to Process Wastewater Provisions - Performance Standards for Treatment Processes Managing Group 1 Wastewater Streams and/or Residuals Removed from Group 1 Wastewater Streams) (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

A. Title 40 CFR § 63.138(i)(1), (i)(1)(i) and (i)(1)(ii), for demonstration of total source mass flow rate requirements

10. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

A. General Leak Detection Requirements:

(i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

(ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

(iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

B. For closed vent system or vapor collection systems constructed of hard piping:

(i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements

11. For the chemical manufacturing facilities subject to transfer operations requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

A. Title 40 CFR § 63.126(e)(1) - (2), and (f) (relating to Transfer Operations Provisions Reference Control Technology)

B. Title 40 CFR § 63.128(f)(1) - (2) (relating to Transfer Operations Provisions - Test Methods and Procedures)

C. Title 40 CFR § 63.130(e) (relating to Transfer Operations Provisions - Periodic Recordkeeping and Reporting)

12. For the transfer of site remediation materials subject to 40 CFR Part 63, Subpart GGGGG off-site to another facility, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1160 incorporated by reference):

A. Title 40 CFR § 63.7936(a), for the transfer of site remediation materials

B. Title 40 CFR § 63.7936(b)(1), for transfer to a landfill or land disposal unit

C. Title 40 CFR § 63.7936(b)(2), for transfer to a facility subject to 40 CFR Part 63, Subpart DD

D. Title 40 CFR § 63.7936(b)(3), (b)(3)(i) - (iv), for transfer to a facility managing the site remediation material according to the requirements of 40 CFR Part 63, Subpart GGGGG

13. For containers managing remediation materials subject to 40 CFR Part 63, Subpart GGGGG, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.1160 incorporated by reference):

A. Title 40 CFR § 63.922(b)(1) - (3), (c), (d), (d)(1) - (5), (e), and (f), (f)(1) - (4) (relating to Standards - Container Level 1 Controls)

B. Title 40 CFR § 63.923(b)(1) - (3), (c), (d), (d)(1) - (5), (e), and (f), (f)(1) - (4) (relating to Standards - Container Level 2 Controls)

C. Title 40 CFR § 63.925(a)(1) - (8), and (b)(1) - (3) (relating to Test Methods and Procedures)

D. Title 40 CFR § 63.926(a)(1) - (3) (relating to Inspection and Monitoring Requirements)

E. Title 40 CFR § 63.7901(b) and (b)(1), for initial demonstration of compliance

F. Title 40 CFR § 63.7901(b)(2), for initial demonstration of compliance

G. Title 40 CFR § 63.7901(c), (c)(1), and (c)(2), for initial demonstration of compliance

H. Title 40 CFR § 63.7901(d), and (d)(1) - (4), for initial demonstration of compliance

I. Title 40 CFR § 63.7903(b) and (b)(1), for continuous demonstration of compliance

J. Title 40 CFR § 63.7903(b)(2), (b)(2)(i), (b)(2)(ii), for continuous demonstration of compliance

K. Title 40 CFR § 63.7903(c)(4), (c)(4)(i), and (c)(4)(ii), for continuous demonstration of compliance

L. Title 40 CFR § 63.7903(d)(5), (d)(5)(i), and (d)(5)(ii), for continuous demonstration of compliance

M. Title 40 CFR § 63.7952(c), for recordkeeping

Additional Monitoring Requirements

14. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of

determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

15. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

16. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

17. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

18. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

19. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

20. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

21. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified

technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

New Source Review Authorization References

EPA-R6-2021-005139 6.7.2022 Prod ED_005994_00002199-00013

Applicable Requirements Summary

Unit Summary 13

Applicable Requirements Summary 17

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
100	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
100	DISTILLATION OPERATIONS	N/A	60NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
100	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
101	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
101	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
1013	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
1013	FLARES	N/A	63A	40 CFR Part 63, Subpart A	Flare Assist Type = Air assisted
1013	FLARES	N/A	63A-1	40 CFR Part 63, Subpart A	Flare Assist Type = Non-assisted, Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
1014	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
1014	FLARES	N/A	63A	40 CFR Part 63, Subpart A	No changing attributes.
1042	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
1042	DISTILLATION OPERATIONS	N/A	60NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
1042	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
1176	BOILERS/ STEAM GENERATORS/ STEAM GENERATING UNITS	N/A	63DDDDD	40 CFR Part 63, Subpart DDDDD	No changing attributes.
118	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
118	DISTILLATION OPERATIONS	N/A	60NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
118	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
97A	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
97A	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
97A	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
99	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
99	DISTILLATION OPERATIONS	N/A	60NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
99	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
C-411	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
C-411	STORAGE TANKS/VESSELS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
C-412	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
C-412	STORAGE TANKS/VESSELS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
C-413	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPGLYCLTK	STORAGE TANKS/VESSELS	SDT10, SDT12, SDT13, SDT15, SDT16, SDT17, SDT18, SDT34, SDT35, SDT9	63G	40 CFR Part 63, Subpart G	No changing attributes.
OX2-FUG	FUGITIVE EMISSION UNITS	N/A	63H	40 CFR Part 63, Subpart H	No changing attributes.
OX2-GLFUG	FUGITIVE EMISSION UNITS	N/A	60VV	40 CFR Part 60, Subpart VV	No changing attributes.
OX2-GLFUG	FUGITIVE EMISSION UNITS	N/A	63H	40 CFR Part 63, Subpart H	No changing attributes.
OXRACK3	LOADING/UNLOADING OPERATIONS	N/A	R5-EO	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
OXRACK3	LOADING/UNLOADING OPERATIONS	N/A	63G-EO	40 CFR Part 63, Subpart G	No changing attributes.
PROEOGL	CHEMICAL MANUFACTURING PROCESS	N/A	63F-1	40 CFR Part 63, Subpart F	No changing attributes.
RB-101	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
RB-109	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
RB-110	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
RB-111	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
SD108	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
SD108A	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
SD108A	FLARES	N/A	63A	40 CFR Part 63, Subpart A	No changing attributes.
SD108VNT	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
TETLOAD	LOADING/UNLOADING OPERATIONS	N/A	R5-EO	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
100	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(4)	None
100	EP	60NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
100	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
101	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(4)	None
101	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
1013	EU	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
1013	CD	63A	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(8)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5)	None	None
1013	CD	63A-1	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
1014	EU	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						in any two-hour period, except for upset emissions as provided in §101.11(a).			
1014	CD	63A	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
1042	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(4)	None
1042	EP	60NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
1042	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
1176	EU	63DDDDD	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
118	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.			
118	EP	60NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
118	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(4)(iii)
97A	EP	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	§ 111.111(a)(1)(D) [G]§ 111.111(a)(1)(F)	§ 111.111(a)(1)(C) § 111.111(a)(1)(D)	None
97A	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
97A	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(4)(iii)
99	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(4)	None
99	EP	60NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
99	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
C-411	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(c)(1)	Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b).	** See Periodic Monitoring Summary	None	None
C-411	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.11 § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) § 63.172(a) [G]§ 63.172(h) § 63.172(i) § 63.172(j)(2) § 63.172(m)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(e)(1) § 63.120(e)(4) [G]§ 63.172(f)(1) [G]§ 63.172(f)(2) § 63.172(g) [G]§ 63.172(h) § 63.172(j)(2) [G]§ 63.172(k) [G]§ 63.172(l) [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.123(a) [G]§ 63.123(f)(2) [G]§ 63.152(a) [G]§ 63.172(k) [G]§ 63.172(l) § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) [G]§ 63.181(g)(2) [G]§ 63.181(g)(3)	[G]§ 63.120(e)(2) § 63.122(c)(2) [G]§ 63.122(g)(1) [G]§ 63.122(g)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
C-412	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(c)(1)	Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b).	** See Periodic Monitoring Summary	None	None
C-412	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.11 § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) § 63.172(a) [G]§ 63.172(h) § 63.172(i) § 63.172(j)(2) § 63.172(m)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(e)(1) § 63.120(e)(4) [G]§ 63.172(f)(1) [G]§ 63.172(f)(2) § 63.172(g) [G]§ 63.172(h) § 63.172(j)(2) [G]§ 63.172(k) [G]§ 63.172(l) [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.123(a) [G]§ 63.123(f)(2) [G]§ 63.152(a) [G]§ 63.172(k) [G]§ 63.172(l) § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) [G]§ 63.181(g)(2) [G]§ 63.181(g)(3)	[G]§ 63.120(e)(2) § 63.122(c)(2) [G]§ 63.122(g)(1) [G]§ 63.122(g)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) [G]§ 63.182(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
C-413	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(c)(1)	Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b).	** See Periodic Monitoring Summary	None	None
GRPGLYCL TK	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.171				[G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.172(a) [G]§ 63.172(h) § 63.172(i) § 63.172(m)	Owners/operators of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in §63.162(b).	[G]§ 63.172(f)(1) [G]§ 63.172(f)(2) § 63.172(g) [G]§ 63.172(h) [G]§ 63.172(l) [G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.172(l) § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) [G]§ 63.181(g)(2) [G]§ 63.181(g)(3)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.172(d) § 63.11(b) § 63.172(e)	Flares used to comply with this subpart shall comply with the	§ 63.172(e) [G]§ 63.172(h) [G]§ 63.180(b)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.172(h) § 63.172(m)	requirements of § 63.11(b) of 40 CFR 63, Subpart A.	[G]§ 63.180(d) [G]§ 63.180(e)	[G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) § 63.181(g)(1)(iii) § 63.181(g)(1)(iv) [G]§ 63.181(g)(2)	[G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
OX2-FUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-GLFUG	EU	60VV	VOC	40 CFR Part 60, Subpart VV	§ 60.482-5(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k)	Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1(c) and paragraph (c) of this section.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
OX2-GLFUG	EU	60VV	VOC	40 CFR Part 60, Subpart VV	§ 60.482-6(a)(1) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k)	Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1(c) and paragraphs (d) and (e) of this section.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
OX2-GLFUG	EU	60VV	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2)	For pumps in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k)			§ 60.486(j)	
OX2-GLFUG	EU	60VV	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	For valves in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
OX2-GLFUG	EU	60VV	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	For pressure relief devices in light liquid or in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
OX2-GLFUG	EU	60VV	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a)	For flanges and other connectors, if an	§ 60.482-8(a)(1) § 60.485(a)	§ 60.482-1(g) [G]§ 60.486(a)	§ 60.487(a) [G]§ 60.487(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	instrument reading of 10,000 ppm or greater is measured, a leak is detected.	[G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(c) § 60.487(e)
OX2-GLFUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-GLFUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-GLFUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-GLFUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
OX2-GLFUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OX2-GLFUG	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
OXRACK3	EU	R5-EO	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(b)(1) § 115.212(b)(1)(A) § 115.212(b)(2) § 115.212(b)(3)(A) § 115.212(b)(3)(A)(ii) § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.212(b)(3)(D) § 115.212(b)(3)(E) § 115.214(b)(1)(B) § 115.214(b)(1)(C) § 60.18	In Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, vapors caused by the loading of VOC with a TVP greater than or equal to 1.5 psia must be controlled using one of the methods specified in §115.212(b)(1)(A)-(C).	§ 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.214(b)(1)(A)(ii) § 115.214(b)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) [G]§ 115.215(3) § 115.215(4)	§ 115.216 § 115.216(1) § 115.216(1)(B) § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 115.215(5) § 115.215(8) § 115.215(9) § 115.216(1) § 115.216(1)(B)		
OXRACK3	EU	63G-EO	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(a) § 63.11 § 63.126(a)(1) § 63.126(a)(2) § 63.126(a)(3) [G]§ 63.126(b)(2) [G]§ 63.126(d)(3) § 63.126(f) § 63.126(g) § 63.126(h) § 63.126(i) § 63.127(d)(2) § 63.127(d)(2)(ii) § 63.172(a) [G]§ 63.172(h) § 63.172(i) § 63.172(j)(2) § 63.172(m)	For Group 1 transfer racks shall operate a vapor collection system and control device for organic HAPs.	[G]§ 63.126(d)(3) § 63.127(a) § 63.127(a)(2) § 63.127(d)(2)(i) § 63.127(e) [G]§ 63.128(b) § 63.152(g)(1)(i) [G]§ 63.152(g)(1)(ii) § 63.152(g)(1)(iii) § 63.152(g)(1)(iv) [G]§ 63.152(g)(1)(v) [G]§ 63.172(f)(1) [G]§ 63.172(f)(2) § 63.172(g) [G]§ 63.172(h) § 63.172(j)(2) [G]§ 63.172(k) [G]§ 63.172(l) [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.127(d)(2)(ii) § 63.129(a)(1) [G]§ 63.129(a)(5) § 63.129(d) § 63.130(a)(1) § 63.130(a)(2)(i) § 63.130(a)(2)(iii) § 63.130(b)(2) § 63.130(c) § 63.130(e) § 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(ii) [G]§ 63.152(a) [G]§ 63.152(f) § 63.152(g)(1) § 63.152(g)(1)(i) [G]§ 63.152(g)(1)(ii) § 63.152(g)(1)(iii) § 63.152(g)(1)(iv) [G]§ 63.152(g)(1)(v) [G]§ 63.152(g)(1)(vi) § 63.152(g)(2) § 63.152(g)(2)(i) § 63.152(g)(2)(ii) § 63.152(g)(2)(iii) [G]§ 63.172(k) [G]§ 63.172(l) § 63.181(a) [G]§ 63.181(b)	§ 63.129(a)(2) § 63.129(a)(3) [G]§ 63.129(a)(5) § 63.130(d)(1) § 63.130(d)(2) § 63.130(d)(3) § 63.130(d)(4) § 63.130(d)(5) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) § 63.152(g)(1) § 63.152(g)(2)(i) § 63.152(g)(2)(ii) [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) [G]§ 63.181(g)(2) [G]§ 63.181(g)(3)	§ 63.182(c)(4) [G]§ 63.182(d)
PROEOGL	PRO	63F-1	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
RB-101	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
RB-109	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare.§63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
RB-110	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									[G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
RB-111	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
SD108	EU	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
SD108A	EU	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for	§ 111.111(a)(4)(A)(i) §	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						more than five minutes in any two-hour period, except for upset emissions as provided in §101.11(a).	111.111(a)(4)(A)(ii)		
SD108A	CD	63A	112(B) HAPS	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
SD108VNT	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18	Any vent gas streams affected by §115.121(c)(1) must be controlled properly:	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2)	None
TETLOAD	EU	R5-EO	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Additional Monitoring Requirements

Periodic Monitoring Summary 40

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: C-411	
Control Device ID No.: 1013 OR 1014	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Once per hour	
Averaging Period: n/a	
Deviation Limit: Absence of Pilot Flame	
Periodic Monitoring Text: Measure and record the presence of the pilot flame or maintain records of alarm events and duration of alarm events. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data which indicates the lack of a pilot flame shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: C-412	
Control Device ID No.: 1013 OR 1014	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Once per hour	
Averaging Period: n/a	
Deviation Limit: Absence of Pilot Flame	
Periodic Monitoring Text: Measure and record the presence of the pilot flame or maintain records of alarm events and duration of alarm events. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data which indicates the lack of a pilot flame shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: C-413	
Control Device ID No.: 1013 OR 1014	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Once per hour	
Averaging Period: n/a	
Deviation Limit: Absence of Pilot Flame	
Periodic Monitoring Text: Measure and record the presence of the pilot flame or maintain records of alarm events and duration of alarm events. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data which indicates the lack of a pilot flame shall be considered and reported as a deviation.	

New Source Review Authorization References

New Source Review Authorization References 44

New Source Review Authorization References by Emission Unit 45

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 22321	Issuance Date: 01/28/2015
Authorization No.: 48653	Issuance Date: 02/19/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
100	CONCENTRATOR COLUMN	48653
1013	RACK 3 PRIMARY FLARE	22321
1014	RACK 3 BACKUP FLARE	22321
101	CONDENSATE TANK	48653
1042	STRIPPER CALANDRIA VENT	48653
1176	LIQUID COOLANT HEATER	48653, 106.264/09/04/2000
118	DI STILL VENT	48653
97A	GAS TURBINE	48653
99	MONO STILL VENT	48653
C-411	#1 EO SURGE TANK	22321
C-412	#2 EO SURGE TANK	22321
C-413	EO FLUSH TANK	22321
OX2-FUG	EOGL UNIT FUGITIVES	22321, 48653
OX2-GLFUG	EOGL UNIT GLYCOLS FUGITIVES	48653
OXRACK3	LOADING RACK 3	22321
PROEOGL	EOGL PROCESS	48653
RB-101	PROCESS WATER TANK VENT	48653
RB-109	NO. 2 EVAPORATOR	48653
RB-110	NO. 3 EVAPORATOR	48653

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
RB-111	NO. 4 EVAPORATOR	48653
SD108A	PROCESS FLARE (SMALL TIP)	48653
SD108	STANDBY PROCESS FLARE (LARGE TIP)	48653
SD108VNT	PROCESS FLARE VENT HEADER	48653
SDT10	TANK 2301	48653
SDT12	TANK 2310	48653
SDT13	TANK 2311	48653
SDT15	TANK 2320	48653
SDT16	TANK 2321	48653
SDT17	TANK 2322	48653
SDT18	TANK 2323	48653
SDT34	TANK 515	48653
SDT35	TANK 516	48653
SDT9	TANK 2300	48653, 106.261/11/01/2003, 106.262/11/01/2003
TETLOAD	TETRALIN LOADING	48653

Appendix A

Acronym List 48

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Union Carbide Corporation

Site Name: UCC Seadrift Operations
Area Name: Ethylene Oxide / Glycol
Physical Location: 7501 State Hwy 185 N
Nearest City: Seadrift
County: Calhoun

Permit Number: O2030
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: March 10, 2017

Operating Permit
Basis of Determination

Permit Area Process Description
The Ethylene Oxide/ Glycol (EOGL) Plant consists of ethylene oxide operations, glycol reaction and refining operations, a gas turbine air supply system, and loading and unloading facilities with surge tanks. The EOGL Plant is classified as a chemical manufacturing process unit (CMPU) subject to the requirements of the Hazardous Organic NESHAPs (HON: MACTs F, G, H). Some of the storage and loading operations associated with the EOGL Plant are considered part of Distribution Systems which are addressed in a separate Title V application area.

Fugitive emissions within the EOGL Plant include VOC and HAPs. All fugitive sources throughout the EOGL Plant are potentially subject to MACT H (depending on service type). For the purposes of NSPS VV, the EOGL Plant may be considered two separate process units: the ethylene oxide process and the glycols process.

Various wastewater streams originate from the EOGL Plant and they are routed to several different Individual Drain Systems (IDS's) for wastewater. These wastewater streams may include VOC and HAPs, and the receiving IDS's are subject to MACT G requirements for wastewater streams. The MACT G wastewater requirements are all site-wide requirements, so the IDS's are not addressed as Title V emission units within this application area.

Ethylene Oxide
Ethylene, fed by pipeline, process air from the gas turbine, oxygen, water, and small amounts of organic reaction modifiers are reacted in the Fresh Reaction System to produce ethylene oxide (EO) as well as feed stream components. This mixture is transferred to the Fresh Scrubbing System. This system recovers crude EO from the fresh reaction stream, recycles gas back to the fresh reaction stream, and generates a blow-off stream of unreacted raw materials. A wastewater stream from the Fresh Scrubbing System is routed to the wastewater treatment system. Crude EO from the scrubbers is routed to Oxide Recovery/ Refining System (ORRS). The ORRS receives streams containing ethylene oxide from the Fresh Scrubbing System and the Blow-Off Reaction/ Scrubbers. Stripping and distillation operations within this system work collectively to produce product-quality ethylene oxide. Ethylene oxide product is transferred to the following destinations:

- Glycol Operations,
- Surge vessels and loading/ unloading facilities; and
- Downstream User Unit (addressed in separate Title V applications).

The ORRS produces a HAP/ VOC process vent stream from the Stripper Calandria (#1042) which is routed to atmosphere. Steam condensate from the ORRS is routed to the condensate tank (#101), which is vented to the atmosphere and may include VOC and HAPs.

Glycol Reaction and Refining Operations
These include systems for producing, concentrating, and refining ethylene and diethylene glycol (EG and DEG). A portion of the EO from the ORRS is fed to the Glycol Reactors, which when reacted with water produce a crude glycol mixture. This mixture is transferred to the Evaporator System. The Evaporator System removes water from the crude glycol stream in a series of evaporative steps and the glycol is progressively concentrated at each step.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1613, O2026, O2027, O2028, O2029, O2031, O2032, O2035

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, PM, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide

requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed before or after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No

Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.

18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Unit ID	Regulation	Index Number	Basis of Determination*
C-411	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe and vapor recovery system True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons Control Device Type = Flare
C-411	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Flare Emission Control Type = Closed vent system (CVS) and control device (fixed roof)
C-412	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe and vapor recovery system True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons Control Device Type = Flare
C-412	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Flare Emission Control Type = Closed vent system (CVS) and control device (fixed roof)

Unit ID	Regulation	Index Number	Basis of Determination*
C-413	30 TAC Chapter 115, Storage of VOCs	R5112	Construction Date = On or after May 12, 1973 Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe and vapor recovery system True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Flare
C-413	40 CFR Part 60, Subpart Kb	60Kb	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
GRPGLYCLTK	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
GRPGLYCLTK	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDMG301	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
SDMG301	40 CFR Part 60, Subpart K	60K	Construction/Modification Date = On or before June 11, 1973
SDMG513	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons
SDMG513	40 CFR Part 60, Subpart K	60K	Construction/Modification Date = On or before June 11, 1973
SDT10	30 TAC Chapter 115, Storage of	R5112	Today's Date = Today's date is March 1, 2013 or later.

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT10	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT12	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT12	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT13	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT13	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT15	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT15	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT16	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
SDT16	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT17	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT17	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT18	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT18	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT34	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT34	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SDT9	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. True Vapor Pressure = True vapor pressure is less than 1.5 psia Product Stored = VOC other than crude oil or condensate
SDT9	40 CFR Part 63, Subpart G	63G	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.

Unit ID	Regulation	Index Number	Basis of Determination*
OXRACK3	30 TAC Chapter 115, Loading and Unloading of VOC	R5-EO	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas, crude oil, condensate and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.
OXRACK3	40 CFR Part 63, Subpart G	63G-EO	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b). Control Device = Flare. Halogenated Emissions = There are no halogenated emission streams from the transfer rack. Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111). Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants. Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv). Bypass Lines = The vent system contains by-pass lines that could divert a vent stream flow away from the control device. Closed Vent System = Closed vent system is subject to § 63.172 of Subpart H. Flow Indicator = The by-pass line valve is secured with a carseal or lock-and-key configuration.
TETLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5-EO	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas, crude oil, condensate and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure is less than 1.5 psia.
1176	40 CFR Part 63, Subpart DDDDD	63DDDDD	Construction/Reconstruction Date = Construction or reconstruction began after June 4, 2010.
1013	30 TAC Chapter 111, Visible Emissions	R1111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
1013	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.
1013	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).

Unit ID	Regulation	Index Number	Basis of Determination*
			Flare Assist Type = Air assisted
1013	40 CFR Part 63, Subpart A	63A-1	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
1014	30 TAC Chapter 111, Visible Emissions	R1111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
1014	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.
1014	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
SD108	30 TAC Chapter 111, Visible Emissions	R1111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
SD108	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.
SD108	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.
SD108A	30 TAC Chapter 111, Visible Emissions	R1111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
SD108A	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.
SD108A	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
97A	40 CFR Part 60, Subpart GG	60GG	Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr) Construction/Modification Date = On or before October 3, 1977.

Unit ID	Regulation	Index Number	Basis of Determination*
97A	40 CFR Part 63, Subpart YYYY	63YYYY	Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed on or before 1/14/2003.
OX2-FUG	40 CFR Part 60, Subpart VV	60VV	Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Construction/Modification Date = On or before January 5, 1981. Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.
OX2-FUG	40 CFR Part 63, Subpart H	63H	ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT NOT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT NOT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT
OX2-GLFUG	40 CFR Part 60, Subpart VV	60VV	Closed Vent (or Vapor Collection) Systems = The fugitive unit does not contain closed vent or vapor collection systems. Compressors = The fugitive unit does not contain compressors. Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices. Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service. Flare = The fugitive unit does not contain flares. Pressure Relief Devices in Heavy or Light Liquid Service = Fugitive unit contains pressure relief devices in heavy or light liquid service. Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service. Sampling Connection Systems = The fugitive unit contains sampling connection systems. Valves in Gas/Vapor or Light Liquid Service = The fugitive unit does not contain valves in gas/vapor or light liquid service. Vapor Recovery System = The fugitive unit does not contain vapor recovery systems. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Vacuum Service = The fugitive unit does not contain equipment in vacuum service. Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006. VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year. Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV. Complying with 40 CFR § 60.482-5 = Sampling connection systems are complying with § 60.482-5. Complying with 40 CFR § 60.482-8 = Pumps in heavy liquid service are complying with § 60.482-8. Pumps in Light Liquid Service = The fugitive unit does not contain pumps in light liquid service. Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr. Flanges and Other Connectors = The fugitive unit contains flanges and other connectors. Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service. Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.

Unit ID	Regulation	Index Number	Basis of Determination*
			Beverage Alcohol Production = The facility does not produce only beverage alcohol. Complying with 40 CFR § 60.482-6 = Open-ended valves or lines are complying with § 60.482-6. Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8. Equipment in VOC Service = The facility contains equipment designed to operate in VOC service.
OX2-GLFUG	40 CFR Part 63, Subpart H	63H	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT NOT PRESENT DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT NOT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT NOT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
100	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above). Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
100	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
101	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above). Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).

Unit ID	Regulation	Index Number	Basis of Determination*
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
101	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = No previous performance test was conducted. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
1042	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above). Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
1042	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60,

Unit ID	Regulation	Index Number	Basis of Determination*
			Subparts III, NNN or RRR. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
118	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above). Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
118	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
97A	30 TAC Chapter 111, Visible Emissions	R1111	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
97A	30 TAC Chapter	R5121	Alternate Control Requirement = Alternate control is not used.

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above). VOC Concentration = VOC concentration is less than 30,000 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
97A	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = No previous performance test was conducted. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
99	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above). Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
99	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.

Unit ID	Regulation	Index Number	Basis of Determination*
			Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
RB-101	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Flare Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = No previous performance test was conducted. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
RB-109	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Flare Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
RB-110	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device = Flare Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = No previous performance test was conducted. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
RB-111	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Flare Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = No previous performance test was conducted. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
SD108VNT	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream emissions of the specified classes of VOCs including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C8 and above).
100	40 CFR Part 60, Subpart NNN	60NNN	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.

Unit ID	Regulation	Index Number	Basis of Determination*
			Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Subpart NNN Control Device = EPA Administrator approved demonstration of compliance with 40 CFR § 60.662 other than 40 CFR § 60.663(a), (b), (c), or (d). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
1042	40 CFR Part 60, Subpart NNN	60NNN	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Subpart NNN Control Device = EPA Administrator approved demonstration of compliance with 40 CFR § 60.662 other than 40 CFR § 60.663(a), (b), (c), or (d). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
118	40 CFR Part 60, Subpart NNN	60NNN	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Subpart NNN Control Device = EPA Administrator approved demonstration of compliance with 40 CFR § 60.662 other than 40 CFR § 60.663(a), (b), (c), or (d). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
99	40 CFR Part 60, Subpart NNN	60NNN	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Subpart NNN Control Device = EPA Administrator approved demonstration of compliance with 40 CFR § 60.662 other than 40 CFR § 60.663(a), (b), (c), or (d). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.

Unit ID	Regulation	Index Number	Basis of Determination*
PROEOGL	40 CFR Part 63, Subpart F	63F-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 22321	Issuance Date: 01/28/2015
Authorization No.: 48653	Issuance Date: 02/19/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: C-411	
Control Device ID No.: 1013 OR 1014	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Once per hour	
Averaging Period: n/a	
Deviation Limit: Absence of Pilot Flame	
Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: C-412	
Control Device ID No.: 1013 OR 1014	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Once per hour	
Averaging Period: n/a	
Deviation Limit: Absence of Pilot Flame	
Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Unit/Group/Process Information	
ID No.: C-413	
Control Device ID No.: 1013 OR 1014	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Once per hour	
Averaging Period: n/a	
Deviation Limit: Absence of Pilot Flame	
Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on **February 14, 2017.**
   Site rating: **0.00 / High** Company rating: **0.56 / Satisfactory**
   (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? .....No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes

OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

Message

From: Donna Williams [donna.williams@tceq.texas.gov]
Sent: 12/27/2016 3:38:34 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Mike Wilson [mike.wilson@tceq.texas.gov]; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Tan Nguyen [Tan.Nguyen@tceq.texas.gov]; Alfredo Mendoza [alfredo.mendoza@tceq.texas.gov]
Subject: Texas Notification Report
Attachments: EPA_20161227.rtf; O1087_GEORGIA-PACIFIC GYPSUM LLC_SOP.docx; O1087_GEORGIA-PACIFIC GYPSUM LLC_SOB.docx; O1362_OXY VINYLS LP_SOP.pdf; O1362_OXY VINYLS LP_SOB.docx; O1541_BLANCHARD REFINING COMPANY LLC_LTR.docx; O1541_BLANCHARD REFINING COMPANY LLC_SOB.docx; O1541_BLANCHARD REFINING COMPANY LLC_SOP.pdf; O1974_EASTMAN CHEMICAL COMPANY_SOB.docx; O1974_EASTMAN CHEMICAL COMPANY_SOP.docx; O2202_BLUE CUBE OPERATIONS LLC_SOP.docx; O2202_BLUE CUBE OPERATIONS LLC_SOB.docx; O2206_THE DOW CHEMICAL COMPANY_SOP.docx; O2206_THE DOW CHEMICAL COMPANY_SOB.docx; O2900_WESTERN EXTRUSIONS CORPORATION_SOP.docx; O2900_WESTERN EXTRUSIONS CORPORATION_SOB.docx; O3184_ENTERPRISE HYDROCARBONS LP_SOB.docx; O3184_ENTERPRISE HYDROCARBONS LP_SOP.docx; O3433_ENTERPRISE PRODUCTS OPERATING LLC_SOB.docx; O3433_ENTERPRISE PRODUCTS OPERATING LLC_SOP.docx; O3823_PLAINS PIPELINE LP_SOP.docx; O3823_PLAINS PIPELINE LP_SOB.docx

Initial Issuance Projects:
O3823 - PLAINS PIPELINE LP

Minor Revision Projects:
O1087 - GEORGIA-PACIFIC GYPSUM LLC
O1974 - EASTMAN CHEMICAL COMPANY
O2202 - BLUE CUBE OPERATIONS LLC
O2206 - THE DOW CHEMICAL COMPANY
O3184 - ENTERPRISE HYDROCARBONS LP

Renewal Projects:
O1362 - OXY VINYLS LP
O2900 - WESTERN EXTRUSIONS CORPORATION
O3433 - ENTERPRISE PRODUCTS OPERATING LLC

Response to Comments:
O1541 - BLANCHARD REFINING COMPANY LLC

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Eastman Chemical Company

Site Name: Eastman Chemical Company Texas Operations
Area Name: C5 - Ethylene Glycol
Physical Location: 300 Kodak Blvd
Nearest City: Longview
County: Harrison

Permit Number: O1974
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: December 6, 2016

Operating Permit
Basis of Determination

Description of Revisions
40 CFR 63, Subpart G applicable requirements were added to EP105T50. This unit had a change in service and is now subject to this regulation. With the exception of this regulation, the existing permit shields for this unit remain. The previously granted permit shield for 40 CFR Part 63, Subpart G has been deleted.

EP104FL1 and EP141FL1 unit name/descriptions have been updated. EP104FL1 was updated to "EO Sewer Tank Pilot Burner" from "EO/EG Plant No.2 Flare". EP141FL1 was updated to "Relief Header Pilot Burner" from "EO-2 Emergency Flare". The applicable requirements remain the same for these two units.

The "New Source Authorization References" table has been updated to reflect the most recent issuance date of NSR Permit 1329, which is 11/16/2016. Previously it was 05/21/2007.

Permit Area Process Description
This application area, Area C5, Ethylene Glycol, consists of two ethylene oxide/ethylene glycol plants and two solvents plants.

The two ethylene oxide/ethylene glycol plants produce ethylene oxide and ethylene glycols from ethylene and oxygen in a continuous process. The process steps include reaction, separation, product storage and product transfer. Emission units are reactors, process tanks, distillation units, process cooling towers and storage tanks; and emission control devices are flares. There are fugitive equipment leaks, heat exchanger leaks and wastewater. The types of emissions are volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

The solvents plants manufacture ethylene glycol ethers from ethylene oxide and alcohols or other glycols ethers. The manufacturing steps include materials storage, reaction, separation, product storage and product transfer. Emission units are reactors, process tanks, distillation units and storage tanks. There are fugitive equipment leaks, heat exchanger leaks and wastewater. The types of emissions are volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1436, O1968, O1970, O1971, O1972, O1973, O1975, O1976, O1977, O1978, O1979, O1981, O1982

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO2, PM, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires

adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with

applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995,

that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No

CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.

20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
EP037T543A	40 CFR Part 63, Subpart G	63G-0007	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP037T543B	40 CFR Part 63, Subpart G	63G-0008	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP038T106	40 CFR Part 63, Subpart G	63G-0012	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP038T106A	40 CFR Part 63, Subpart G	63G-0013	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP038T131	40 CFR Part 63, Subpart G	63G-0014	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP039T113	40 CFR Part 63, Subpart G	63G-0022	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP039T606A	40 CFR Part 63, Subpart G	63G-0023	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP039T606B	40 CFR Part 63, Subpart G	63G-0024	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP104T51	40 CFR Part 63, Subpart G	63G-0028	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP104T52	40 CFR Part 63, Subpart G	63G-0029	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP105T50	40 CFR Part 63, Subpart G	68G-0028	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.

Unit ID	Regulation	Index Number	Basis of Determination*
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD020T116	40 CFR Part 63, Subpart G	63G-0047	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD021T137	40 CFR Part 63, Subpart G	63G-0036	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD093T2	40 CFR Part 63, Subpart G	63G-0037	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T3	40 CFR Part 63, Subpart G	63G-0038	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T4	40 CFR Part 63, Subpart G	63G-0039	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T5	40 CFR Part 63, Subpart G	63G-0040	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T6	40 CFR Part 63, Subpart G	63G-0041	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T7	40 CFR Part 63, Subpart G	63G-0042	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD098T8	40 CFR Part 63, Subpart G	63G-0043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD099T14	40 CFR Part 63, Subpart G	63G-0044	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD099T15	40 CFR Part 63, Subpart G	63G-0045	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.

Unit ID	Regulation	Index Number	Basis of Determination*
			NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
SD101T21	40 CFR Part 63, Subpart G	63G-0046	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
EP104FL1	30 TAC Chapter 111, Visible Emissions	R1111-0001	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
EP141FL1	30 TAC Chapter 111, Visible Emissions	R1111-0002	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
EP036FG1	40 CFR Part 63, Subpart H	63H-0001	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER

Unit ID	Regulation	Index Number	Basis of Determination*
			CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP037FG1	40 CFR Part 63, Subpart H	63H-0002	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP038FG1	40 CFR Part 63, Subpart H	63H-0003	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO

Unit ID	Regulation	Index Number	Basis of Determination*
			PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP038FG2	40 CFR Part 63, Subpart H	63H-0004	ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES

Unit ID	Regulation	Index Number	Basis of Determination*
			RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT NOT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
EP036U1	30 TAC Chapter 111, Visible Emissions	R1111-0003	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.

Unit ID	Regulation	Index Number	Basis of Determination*
EP037U501	30 TAC Chapter 111, Visible Emissions	R1111-0004	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
EP038D101R	40 CFR Part 63, Subpart G	63G-0001	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Condenser used as a recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is greater than or equal to 50 ppm. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
EP038D601	40 CFR Part 63, Subpart G	63G-0002	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Absorber used as a recovery device. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is greater than or equal to 50 ppm. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to

Unit ID	Regulation	Index Number	Basis of Determination*
			demonstrate this flow rate. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
EP037D513	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
EP037D514	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
EP037D516	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
EP038D102R	40 CFR Part 60, Subpart NNN	60NNN-0001	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).

Unit ID	Regulation	Index Number	Basis of Determination*
			Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
PROEOEG1	40 CFR Part 63, Subpart F	63F-0001	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
PROEOEG2	40 CFR Part 63, Subpart F	63F-0002	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.

Unit ID	Regulation	Index Number	Basis of Determination*
			Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
PROES1	40 CFR Part 63, Subpart F	63F-0003	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
PROES1	40 CFR Part 63, Subpart FFFF	63FFFF-0002	Designated Grp1 = The emission stream is not designated as Group 1. Determined Grp1 = The emission stream is determined to be Group 2.
PROES2	40 CFR Part 63, Subpart F	63F-0004	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. Heat Exchange System = A heat exchange system is utilized. Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 1329	Issuance Date: 11/16/2016
Authorization No.: 49363	Issuance Date: 09/09/2004
Authorization No.: 52985	Issuance Date: 11/10/2005
Authorization No.: 6419	Issuance Date: 11/13/2006
Authorization No.: 84724	Issuance Date: 08/19/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 03/14/1997
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: EP036U1	
Control Device ID No.: N/A	Control Device Type: N/A

Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0003
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: EP037U501	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0004
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 20%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes

OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Eastman Chemical Company

AUTHORIZING THE OPERATION OF
Eastman Chemical Company Texas Operations
C5 - Ethylene Glycol
Industrial Organic Chemicals

LOCATED AT
Harrison County, Texas
Latitude 32° 26' 15" Longitude 94° 41' 37"
Regulated Entity Number: RN100219815

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1974 Issuance Date: November 12, 2014

[ADVANCE \x 144]For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subpart F, G, H and FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §§ 113.110, 113.120, 113.130 and 113.890 respectively which incorporates the 40 CFR Part 63 Subpart by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

   A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

   B. Title 40 CFR § 60.8 (relating to Performance Tests)

   C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

   D. Title 40 CFR § 60.12 (relating to Circumvention)

   E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

   F. Title 40 CFR § 60.14 (relating to Modification)

   G. Title 40 CFR § 60.15 (relating to Reconstruction)

   H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

5. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

6. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

7. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General)

   B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

   C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

8. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

   A. General Leak Detection Requirements:

      (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

(ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

(iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

(iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

9. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

10. For site remediation projects subject to 40 CFR Part 63, Subpart GGGGG that are completed within 30 consecutive calendar days the permit holder shall comply with 40 CFR § 63.7884(b), (b)(1) - (3) (Title 30 TAC, Subchapter C, § 113.1160 incorporated by reference).

11. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

12. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

13. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating

Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

A. Are incorporated by reference into this permit as applicable requirements

B. Shall be located with this operating permit

C. Are not eligible for a permit shield

14. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

15. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.

A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.

B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

16. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

17. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Risk Management Plan

18. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Permit Location

19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 11

Applicable Requirements Summary 15

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EP036FG1	FUGITIVE EMISSION UNITS	N/A	63H-0001	40 CFR Part 63, Subpart H	No changing attributes.
EP036U1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-0003	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EP037D513	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP037D514	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP037D516	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP037FG1	FUGITIVE EMISSION UNITS	N/A	63H-0002	40 CFR Part 63, Subpart H	No changing attributes.
EP037T543A	STORAGE TANKS/VESSELS	N/A	63G-0007	40 CFR Part 63, Subpart G	No changing attributes.
EP037T543B	STORAGE TANKS/VESSELS	N/A	63G-0008	40 CFR Part 63, Subpart G	No changing attributes.
EP037U501	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-0004	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EP038D101R	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-0001	40 CFR Part 63, Subpart G	No changing attributes.
EP038D102R	DISTILLATION OPERATIONS	N/A	60NNN-0001	40 CFR Part 60, Subpart NNN	No changing attributes.
EP038D601	EMISSION POINTS/STATIONARY	N/A	63G-0002	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
EP038FG1	FUGITIVE EMISSION UNITS	N/A	63H-0003	40 CFR Part 63, Subpart H	No changing attributes.
EP038FG2	FUGITIVE EMISSION UNITS	N/A	63H-0004	40 CFR Part 63, Subpart H	No changing attributes.
EP038T106	STORAGE TANKS/VESSELS	N/A	63G-0012	40 CFR Part 63, Subpart G	No changing attributes.
EP038T106A	STORAGE TANKS/VESSELS	N/A	63G-0013	40 CFR Part 63, Subpart G	No changing attributes.
EP038T131	STORAGE TANKS/VESSELS	N/A	63G-0014	40 CFR Part 63, Subpart G	No changing attributes.
EP039T113	STORAGE TANKS/VESSELS	N/A	63G-0022	40 CFR Part 63, Subpart G	No changing attributes.
EP039T606A	STORAGE TANKS/VESSELS	N/A	63G-0023	40 CFR Part 63, Subpart G	No changing attributes.
EP039T606B	STORAGE TANKS/VESSELS	N/A	63G-0024	40 CFR Part 63, Subpart G	No changing attributes.
EP104FL1	FLARES	N/A	R1111-0001	30 TAC Chapter 111, Visible Emissions	No changing attributes.
EP104T51	STORAGE TANKS/VESSELS	N/A	63G-0028	40 CFR Part 63, Subpart G	No changing attributes.
EP104T52	STORAGE TANKS/VESSELS	N/A	63G-0029	40 CFR Part 63, Subpart G	No changing attributes.
EP105T50	STORAGE TANKS/VESSELS	N/A	68G-0028	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EP141FL1	FLARES	N/A	R1111-0002	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PROEOEG1	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0001	40 CFR Part 63, Subpart F	No changing attributes.
PROEOEG2	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0002	40 CFR Part 63, Subpart F	No changing attributes.
PROES1	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0003	40 CFR Part 63, Subpart F	No changing attributes.
PROES1	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF-0002	40 CFR Part 63, Subpart FFFF	No changing attributes.
PROES2	CHEMICAL MANUFACTURING PROCESS	N/A	63F-0004	40 CFR Part 63, Subpart F	No changing attributes.
SD020T116	STORAGE TANKS/VESSELS	N/A	63G-0047	40 CFR Part 63, Subpart G	No changing attributes.
SD021T137	STORAGE TANKS/VESSELS	N/A	63G-0036	40 CFR Part 63, Subpart G	No changing attributes.
SD093T2	STORAGE TANKS/VESSELS	N/A	63G-0037	40 CFR Part 63, Subpart G	No changing attributes.
SD098T3	STORAGE TANKS/VESSELS	N/A	63G-0038	40 CFR Part 63, Subpart G	No changing attributes.
SD098T4	STORAGE TANKS/VESSELS	N/A	63G-0039	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
SD098T5	STORAGE TANKS/VESSELS	N/A	63G-0040	40 CFR Part 63, Subpart G	No changing attributes.
SD098T6	STORAGE TANKS/VESSELS	N/A	63G-0041	40 CFR Part 63, Subpart G	No changing attributes.
SD098T7	STORAGE TANKS/VESSELS	N/A	63G-0042	40 CFR Part 63, Subpart G	No changing attributes.
SD098T8	STORAGE TANKS/VESSELS	N/A	63G-0043	40 CFR Part 63, Subpart G	No changing attributes.
SD099T14	STORAGE TANKS/VESSELS	N/A	63G-0044	40 CFR Part 63, Subpart G	No changing attributes.
SD099T15	STORAGE TANKS/VESSELS	N/A	63G-0045	40 CFR Part 63, Subpart G	No changing attributes.
SD101T21	STORAGE TANKS/VESSELS	N/A	63G-0046	40 CFR Part 63, Subpart G	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B)	40 CFR Part 63,	[G]§ 63.169	Standards: Pressure relief	[G]§ 63.169	§ 63.181(a)	[G]§ 63.182(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	devices in liquid service. §63.169(a)-(d)	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.181(h)(7) § 63.181(h)(8)	
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036FG1	EU	63H-0001	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP036U1	EP	R1111-0003	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EP037D513	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d),	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						(e), (f); and § 60.665(h) and (l).	§ 60.664(g)(2)		
EP037D514	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
EP037D516	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f)	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(i)	§ 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c)	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(i)	[G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037FG1	EU	63H-0002	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c)	Standards: Valves in gas/vapor service and in light liquid service.	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	§63.168(a)-(j)	[G]§ 63.180(d)	[G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP037T543 A	EU	63G-0007	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP037T543 B	EU	63G-0008	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP037U501	EP	R1111-0004	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
EP038D101 R	EP	63G-0001	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						with the sections as specified.	§ 63.115(e)(1) [G]§ 63.115(f)		§ 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
EP038D102R	EP	60NNN-0001	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h) § 60.665(p)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7) § 60.665(p)
EP038D601	EP	63G-0002	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B)	40 CFR Part 63,	[G]§ 63.169	Standards: Connectors in	[G]§ 63.169	§ 63.181(a)	[G]§ 63.182(a)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	heavy liquid service. §63.169(a)-(d)	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B)	40 CFR Part 63,	[G]§ 63.174	Standards: Connectors in	[G]§ 63.174	§ 63.181(a)	[G]§ 63.182(a)

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			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG1	EU	63H-0003	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								[G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171 [G]§ 63.176			[G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038FG2	EU	63H-0004	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
EP038T106	EU	63G-0012	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP038T106A	EU	63G-0013	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP038T131	EU	63G-0014	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP039T113	EU	63G-0022	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP039T606A	EU	63G-0023	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP039T606B	EU	63G-0024	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
EP104FL1	EU	R1111-0001	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
EP104T51	EU	63G-0028	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP104T52	EU	63G-0029	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP105T50	EU	68G-0028	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
EP141FL1	EU	R1111-0002	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						emissions as provided in §101.222(b).			
PROEOEG1	PRO	63F-0001	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
PROEOEG2	PRO	63F-0002	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
PROES1	PRO	63F-0003	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)
PROES1	PRO	63FFFF-0002	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2460(a) § 63.2450(b) § 63.2460(b)	You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b)	[G]§ 63.1257(d)(2)(i) [G]§ 63.1257(d)(2)(ii) § 63.2460(b)(1) § 63.2460(b)(2) § 63.2460(b)(3)	§ 63.2460(b)(6)(i) § 63.2460(b)(7)	§ 63.2460(b)(6) § 63.2460(b)(6)(i) § 63.2460(b)(6)(ii) § 63.2460(b)(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and (c).	[G]§ 63.2460(b)(4) § 63.2460(b)(7)		
PROES2	PRO	63F-0004	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6)	[G]§ 63.103(c) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d)
SD020T116	EU	63G-0047	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD021T137	EU	63G-0036	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD093T2	EU	63G-0037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T3	EU	63G-0038	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.			
SD098T4	EU	63G-0039	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T5	EU	63G-0040	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T6	EU	63G-0041	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T7	EU	63G-0042	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD098T8	EU	63G-0043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.			
SD099T14	EU	63G-0044	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD099T15	EU	63G-0045	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
SD101T21	EU	63G-0046	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Additional Monitoring Requirements

Periodic Monitoring Summary 36

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: EP036U1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0003
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 30%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: EP037U501	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-0004
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall either report a deviation or perform Test Method 9 within 24 hours and opacity shall not exceed 20%.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036D10	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D10	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036D11	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D11	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D13	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D13	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D16	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D16	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D19	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D19	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036D20	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D20	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036D3	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D3	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP036D4	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D4	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream contains less than 0.005 wt. % HAP.
EP036D5	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D5	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036D6	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D6	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036D7	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D7	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036D8R	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP036D8R	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP036D9	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP036D9	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036FG1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP036FG1	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP036FG1	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP036MWW1	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP036R1	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			reconstructed after 10/21/83.
EP036R1	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP036R1	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036R2	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP036R2	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP036R2	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036R3	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP036R3	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP036R3	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP036T4	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP036T4	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036T4	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP036T4	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP036T4	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per 63.101 since the unit does not contain organic HAP.
EP036T4	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP036T43A	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP036T43A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP036T43A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP036T43A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP036T43A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP036T43A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP036T43B	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP036T43B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP036T43B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP036T43B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP036T43B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP036T43B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP036U1	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036U1	N/A	40 CFR Part 63, Subpart Q	Unit did not operate with chromium based chemicals after 9/8/94.
EP036VS1	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP036WW1	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP037D503	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037D503	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D504	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D504	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream contains less than 0.005 wt. % HAP.
EP037D505	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D505	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D506R	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP037D506R	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D507	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D507	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D508	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D508	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			stream does not originate from a distillation unit (as defined in §63.101).
EP037D509	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D509	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D510	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP037D510	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037D511	N/A	40 CFR Part 60, Subpart NNN	Distillation system not constructed, modified, or reconstructed after 12/30/83.
EP037D511	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D512	N/A	40 CFR Part 60, Subpart NNN	Unit does not meet the definition of distillation unit per §60.661.
EP037D512	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; gas stream does not originate from a distillation unit (as defined in §63.101).
EP037D513	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037D514	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D515	N/A	40 CFR Part 60, Subpart NNN	Distillation system not constructed, modified, or reconstructed after 12/30/83.
EP037D515	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037D516	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037FG1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP037FG1	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP037FG1	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP037MWW1	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP037R501A	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R501A	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			reconstructed after 6/29/90.
EP037R501A	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037R501B	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R501B	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R501B	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037R502	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R502	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R502	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037R503	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP037R503	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP037R503	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037R504	N/A	40 CFR Part 60, Subpart III	The reactor system has not been constructed, modified, or reconstructed after 10/21/83.
EP037R504	N/A	40 CFR Part 60, Subpart RRR	The reactor system has not been constructed, modified, or reconstructed after 6/29/90.
EP037R504	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent; stream discharges to a fuel gas system.
EP037T128	N/A	40 CFR Part 60, Subpart Kb	Unit storage capacity is less than 75 cubic meters.
EP037T128	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T128	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T128	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T128	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP037T128	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T504	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037T504	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T504	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T504	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T504	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP037T504	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T513	N/A	40 CFR Part 60, Subpart Kb	Unit storage capacity is less than 75 cubic meters.
EP037T513	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T513	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T513	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T513	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit is a surge control vessel.
EP037T513	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			category in Table 1 to §63.1100(a).
EP037T543A	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP037T543A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T543A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T543A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T543A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T543B	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP037T543B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T543B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T543B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T543B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T544A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP037T544A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP037T544A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T544A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T544A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP037T544A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037T544B	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP037T544B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP037T544B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP037T544B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP037T544B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP037T544B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP037U501	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037U501	N/A	40 CFR Part 63, Subpart Q	Unit did not operate with chromium based chemicals after 9/8/94.
EP037VS1	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP037WW1	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038D101R	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D102R	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D103	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D103	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D104	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D104	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			in the gas phase per §63.107(f).
EP038D601	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D602	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D602	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D603	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D603	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038D604	N/A	40 CFR Part 60, Subpart NNN	Unit not constructed, modified, or reconstructed after 12/30/83.
EP038D604	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038FG1	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP038FG1	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP038FG1	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			service.
EP038FG2	N/A	40 CFR Part 60, Subpart VV	Facility not constructed, modified, or reconstructed after 01/05/81.
EP038FG2	N/A	40 CFR Part 61, Subpart J	Facility does not have sources in benzene service.
EP038FG2	N/A	40 CFR Part 61, Subpart V	Facility does not have sources in VHAP service.
EP038J101	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038J601	N/A	40 CFR Part 63, Subpart G	Distillation system does not have a process vent; gas stream does not remain in the gas phase per §63.107(f).
EP038MWW1	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038MWW2	N/A	40 CFR Part 63, Subpart FFFF	Maintenance wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038R101	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP038R101	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP038R101	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent as gas stream is passed to another distillation unit (EP038D101R) before discharged into the atmosphere.
EP038R601	N/A	40 CFR Part 60, Subpart III	Unit not constructed, modified, or reconstructed after 10/21/83.
EP038R601	N/A	40 CFR Part 60, Subpart RRR	Unit not constructed, modified, or reconstructed after 6/29/90.
EP038R601	N/A	40 CFR Part 63, Subpart G	Unit does not have a process vent as gas stream is passed to another distillation unit (EP038D601) before discharged into the atmosphere.
EP038T105	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T105	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T105	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T105	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T105	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T105	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			category in Table 1 to §63.1100(a).
EP038T106	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T106	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T106	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T106	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T106	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T106A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T106A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T106A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T106A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T106A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T131	N/A	40 CFR Part 60, Subpart Kb	Unit storage capacity is less than 75 cubic meters.
EP038T131	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			containing waste stream.
EP038T131	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T131	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T131	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T132A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T132A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T132A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T132A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T132A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T132A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T132B	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T132B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			containing waste stream.
EP038T132B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T132B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T132B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T132B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP038T605	N/A	40 CFR Part 60, Subpart Ka	Unit capacity is less than 151,412 liters (40,000 gallons).
EP038T605	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP038T605	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP038T605	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP038T605	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP038T605	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP038WW1	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP038WW2	N/A	40 CFR Part 63, Subpart FFFF	Group 2 wastewater stream is an affected source subject to 40 CFR Part 63, Subpart G and is not a batch process vent.
EP039T109	N/A	40 CFR Part 60, Subpart Ka	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T109	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T109	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T109	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T109	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T109	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T110	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T110	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP039T110	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T110	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T110	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T110	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T111	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T111	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T111	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T111	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T111	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T111	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T112	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			(40,000 gallons).
EP039T112	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T112	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T112	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T112	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit capacity is less than 38 cubic meters.
EP039T112	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T113	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T113	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T113	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T113	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T113	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T606A	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP039T606A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T606A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T606A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T606A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T606B	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
EP039T606B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T606B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T606B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T606B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T613	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
EP039T613	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T613	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T613	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP039T613	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP039T613	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP039T614	N/A	40 CFR Part 60, Subpart Ka	Unit capacity is less than 151,412 liters (40,000 gallons).
EP039T614	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP039T614	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP039T614	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP039T614	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP039T614	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104FL1	N/A	40 CFR Part 60, Subpart A	Unit not used to comply with part 60 or 61 standards.
EP104FL1	N/A	40 CFR Part 63, Subpart A	Unit not required by relevant part 63 standard.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP104T161	N/A	40 CFR Part 60, Subpart Kb	Storage vessel capacity is between 75 cubic meters and 151 cubic meters and stores a liquid with a maximum true vapor pressure < 15 kPa.
EP104T161	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T161	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T161	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T161	N/A	40 CFR Part 63, Subpart G	Unit only manages wastewater from HON excluded activities.
EP104T161	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104T51	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP104T51	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T51	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T51	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T51	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104T52	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP104T52	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T52	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T52	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T52	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP104T56	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP104T56	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP104T56	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T56	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T56	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per 63.101 since the unit does not contain organic HAP.
EP104T56	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to 63.1100(a).
EP104T57	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP104T57	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			containing waste stream.
EP104T57	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP104T57	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP104T57	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP104T57	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T11A	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP105T11A	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T11A	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T11A	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T11A	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit is a surge control vessel.
EP105T11A	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
EP105T11B	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP105T11B	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T11B	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T11B	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T11B	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit is a surge control vessel.
EP105T11B	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T40	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP105T40	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T40	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T40	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T40	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			contain organic HAP.
EP105T40	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T50	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP105T50	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T50	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T50	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T50	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP105T53	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
EP105T53	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T53	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T53	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T53	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP105T53	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			category in Table 1 to §63.1100(a).
EP105T540	N/A	40 CFR Part 60, Subpart K	Unit capacity is less than 151,412 liters (40,000 gallons).
EP105T540	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
EP105T540	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
EP105T540	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
EP105T540	N/A	40 CFR Part 63, Subpart G	Unit is part of an affected CMPU but does not meet the definition of a storage vessel per §63.101 since the unit does not contain organic HAP.
EP105T540	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
EP141FL1	N/A	40 CFR Part 60, Subpart A	Unit not used to comply with part 60 or 61 standards.
EP141FL1	N/A	40 CFR Part 63, Subpart A	Unit not required by relevant part 63 standard.
PROEOEG1	N/A	40 CFR Part 63, Subpart FFFF	The MCPU is an affected source or part of an affected source under another MACT standard and does not include any process vents as identified in §63.100(j)(4).

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
PROEOEG1	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
PROEOEG2	N/A	40 CFR Part 63, Subpart FFFF	The MCPU is an affected source or part of an affected source under another MACT standard and does not include any process vents as identified in §63.100(j)(4).
PROEOEG2	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
PROES1	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
PROES2	N/A	40 CFR Part 63, Subpart FFFF	The MCPU is an affected source or part of an affected source under another MACT standard and does not include any process vents as identified in §63.100(j)(4).
PROES2	N/A	40 CFR Part 63, Subpart YY	Process is not listed as a source category in Table 1 to §63.1100(a).
SD020T116	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD020T116	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD020T116	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD020T116	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD020T116	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD021T137	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD021T137	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD021T137	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD021T137	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD021T137	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD093T2	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD093T2	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD093T2	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD093T2	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD093T2	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T3	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T3	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD098T3	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T3	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T3	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T4	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T4	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T4	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T4	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T4	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T5	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T5	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T5	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T5	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T5	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD098T6	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T6	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T6	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T6	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T6	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T7	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T7	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T7	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD098T7	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T7	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD098T8	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD098T8	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD098T8	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
SD098T8	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD098T8	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD099T14	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
SD099T14	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD099T14	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD099T14	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD099T14	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD099T15	N/A	40 CFR Part 60, Subpart Ka	Unit does not store a petroleum liquid.
SD099T15	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene containing waste stream.
SD099T15	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD099T15	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD099T15	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).
SD101T21	N/A	40 CFR Part 60, Subpart K	Unit does not store a petroleum liquid.
SD101T21	N/A	40 CFR Part 61, Subpart FF	Unit not used to manage a benzene

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			containing waste stream.
SD101T21	N/A	40 CFR Part 61, Subpart Y	Unit does not store refined or industrial grade benzene.
SD101T21	N/A	40 CFR Part 63, Subpart FFFF	Unit is not part of an affected MCPU.
SD101T21	N/A	40 CFR Part 63, Subpart YY	Unit is not listed as a part of a source category in Table 1 to §63.1100(a).

New Source Review Authorization References

New Source Review Authorization References 78

New Source Review Authorization References by Emission Unit 79

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 1329	Issuance Date: 11/16/2016
Authorization No.: 49363	Issuance Date: 09/09/2004
Authorization No.: 52985	Issuance Date: 11/10/2005
Authorization No.: 6419	Issuance Date: 11/13/2006
Authorization No.: 84724	Issuance Date: 08/19/2013
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 03/14/1997
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP036D10	EO-1 RESIDUAL EO ABSORBER COLUMN	49363
EP036D11	EG-1 GLYCOL PRECONCENTRATOR COLUMN	49363
EP036D13	EG-1 GLYCOL DEHYDRATOR COLUMN	49363
EP036D16	EG-1 POLYGLYCOL FLASH COLUMN	49363
EP036D19	EG-1 DEG STRIPPER COLUMN	49363
EP036D20	EG-1 TEG PURIFICATION COLUMN	49363
EP036D3	EO-1 CO2 ABSORBER COLUMN	49363
EP036D4	EO-1 CO2 STRIPPER COLUMN	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP036D5	EO-1 EO ABSORBER COLUMN	49363
EP036D6	EO-1 QUENCH BLEED STRIPPER COLUMN	49363
EP036D7	EO-1 EO STRIPPER COLUMN	49363
EP036D8R	EO-1 LIGHT ENDS COLUMN	49363
EP036D9	EO-1 EO PURIFICATION COLUMN	49363
EP036FG1	EO/EG PLANT NO. 1 EQUIPMENT FUGITIVES	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP036MWW1	EO/EG PLANT NO. 1 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP036R1	EO-1 EO REACTOR	49363
EP036R2	EG-1 GLYCOL REACTOR	49363

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP036R3	EO-1 ACETYLENE CONVERTER REACTOR	49363
EP036T43A	DEG RUNDOWN TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000
EP036T43B	EG RUNDOWN TANK	49363
EP036T4	EO-1 COOLANT SURGE TANK	49363
EP036U1	EO/EG PLANT NO. 1 PROCESS COOLING TOWER	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP036VS1	EO/EG-1 GLYCOL DISTILLATION COLUMN JETS	49363
EP036WW1	EO/EG PLANT NO. 1 WASTEWATER	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP037D503	EO-2 CO2 ABSORBER COLUMN	1329
EP037D504	EO-2 CO2 STRIPPER COLUMN	1329
EP037D505	EO-2 EO ABSORBER COLUMN	1329
EP037D506R	EO-2 QUENCH BLEED STRIPPER COLUMN	106.264/03/14/1997
EP037D507	EO-2 EO STRIPPER COLUMN	1329
EP037D508	EO-2 LIGHT ENDS COLUMN	1329
EP037D509	EO-2 EO PURIFICATION COLUMN	1329
EP037D510	EO-2 RESIDUAL EO ABSORBER COLUMN	1329
EP037D511	EG-2 GLYCOL PRECONCENTRATOR COLUMN	1329
EP037D512	EG-2 GLYCOL BLEED FLASHER COLUMN	1329

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP037D513	EG-2 GLYCOL DEHYDRATOR COLUMN	106.264/09/04/2000
EP037D514	EG-2 EG PURIFICATION COLUMN	106.264/09/04/2000
EP037D515	EG-2 EG RECYCLE COLUMN	1329
EP037D516	EG-2 DEG PURIFICATION COLUMN	106.264/09/04/2000
EP037FG1	EO/EG PLANT NO. 2 FUGITIVE EMISSIONS	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037MWW1	EO/EG PLANT NO. 2 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP037R501A	EO-2 EO REACTOR	1329
EP037R501B	EO-2 EO REACTOR	1329
EP037R502	EG-2 GLYCOL REACTOR	1329
EP037R503	EO-2 ACETYLENE CONVERTER REACTOR	1329
EP037R504	EO-1/2 METHANE ACETYLENE REACTOR	49363
EP037T128	EG-2 GLYCOL HIGH BOILERS STORAGE TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T504	EO-2 COOLANT SURGE DRUM	106.261/09/04/2000, 106.262/09/04/2000
EP037T513	EG-2 DIRTY CONDENSATE TANK	106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000
EP037T543A	EG-2 EG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T543B	EG-2 EG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP037T544A	EG-2 DEG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037T544B	EG-2 DEG RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP037U501	EO/EG PLANT NO. 2 PROCESS COOLING TOWER	1329
EP037VS1	EO/EG-2 GLYCOL DISTILLATION COLUMN JETS	1329
EP037WW1	EO/EG PLANT NO. 2 WASTEWATER	1329
EP038D101R	ES-1 ALCOHOL REMOVAL COLUMN	52985, 106.261/11/01/2003, 106.262/11/01/2003
EP038D102R	ES-1 MONO COLUMN	106.264/09/04/2000
EP038D103	ES-1 REFINING COLUMN	52985
EP038D104	ES-1 FLASHER COLUMN	52985
EP038D601	ES-2 ALCOHOL RECOVERY COLUMN	6419, 106.261/11/01/2003, 106.262/11/01/2003
EP038D602	ES-2 MONO COLUMN	6419
EP038D603	ES-2 DI COLUMN	6419
EP038D604	ES-2 DI-TRI FLASHER COLUMN	6419
EP038FG1	SOLVENTS PLANT NO. 1 EQUIPMENT LEAKS	52985, 106.261/11/01/2003, 106.262/11/01/2003
EP038FG2	SOLVENTS PLANT NO. 2 EQUIPMENT LEAKS	6419, 106.261/11/01/2003, 106.262/11/01/2003

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP038J101	ES-1 GLYCOL ETHER DISTILLATION COLUMN JETS	52985
EP038J601	ES-2 GLYCOL ETHER DISTILLATION COLUMN JETS	6419
EP038MWW1	SOLVENTS PLANT NO. 1 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP038MWW2	SOLVENTS PLANT NO. 2 MAINTENANCE WASTEWATER	106.263/11/01/2001
EP038R101	ES-1 GLYCOL ETHER REACTOR	52985
EP038R601	ES-2 GLYCOL ETHER REACTOR	6419
EP038T105	ES-1 D-101 ACCUMULATOR TANK	52985, 106.261/11/01/2003, 106.262/11/01/2003
EP038T106A	ES-1 MONO RUNDOWN TANK	52985
EP038T106	ES-1 MONO RUNDOWN TANK	52985
EP038T131	ES-1 DI/TRI PROPYL RUNDOWN TANK	52985
EP038T132A	ES-1 DI RUNDOWN TANK	52985, 106.472/09/04/2000
EP038T132B	ES-1 DI RUNDOWN TANK	52985, 106.472/09/04/2000
EP038T605	ES-2 REFLUX ACCUMULATOR TANK	6419
EP038WW1	SOLVENTS PLANT NO. 1 WASTEWATER	52985
EP038WW2	SOLVENTS PLANT NO. 2 WASTEWATER	6419
EP039T109	ES-1 MIXED ALCOHOLS TANK	52985
EP039T110	ES-2 CRUDE GLYCOL ETHERS STORAGE TANK	6419
EP039T111	ES-2 HIGH BOILER STORAGE TANK	6419, 106.261/11/01/2003

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP039T112	ES-1 PROPYL HIGH BOILERS STORAGE TANK	52985, 106.472/09/04/2000
EP039T113	ES-1 CRUDE PROPYL ETHERS STORAGE TANK	52985
EP039T606A	ES-2 MONO RUNDOWN TANK	6419, 106.472/09/04/2000
EP039T606B	ES-2 MONO RUNDOWN TANK	6419, 106.264/03/14/1997
EP039T613	ES-2 ALCOHOL FEED TANK	6419, 106.262/09/04/2000
EP039T614	ES-2 ALCOHOL FEED TANK	6419
EP104FL1	EO SEWER TANK PILOT BURNER	1329, 84724, 106.183/09/04/2000
EP104T161	EO/EG PLANT NO. 2 FLARE TANK	1329
EP104T51	EG-2 EG STORAGE TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP104T52	EG-1 CRUDE GLYCOLS STORAGE TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP104T56	EG-2 DEG STORAGE TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP104T57	EG-2 POLYGLYCOL RUNDOWN TANK	1329, 106.261/11/01/2003, 106.262/11/01/2003
EP105T11A	EO-1/2 EO RUNDOWN TANK	1329, 49363
EP105T11B	EO-1/2 EO RUNDOWN TANK	1329, 49363
EP105T40	EO-1 KEROSENE STORAGE TANK	49363
EP105T50	EG-1 EG STORAGE TANK	106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
EP105T53	EG-1 TTG STORAGE TANK	49363, 106.261/11/01/2003, 106.262/11/01/2003
EP105T540	EO-2 KEROSENE STORAGE TANK	1329, 106.472/09/04/2000
EP141FL1	RELIEF HEADER PILOT BURNER	1329, 84724, 106.183/09/04/2000
PROEOEG1	EO/EG PLANT NO. 1 PROCESS	49363
PROEOEG2	EO/EG PLANT NO. 2 PROCESS	1329
PROES1	SOLVENTS PLANT NO. 1 PROCESS	52985
PROES2	SOLVENTS PLANT NO. 2 PROCESS	6419
SD020T116	ES-2 EP STORAGE TANK	6419, 106.472/09/04/2000
SD021T137	ES-2 DE STORAGE TANK	106.472/09/04/2000
SD093T2	ES-2 EP STORAGE TANK	6419, 106.472/09/04/2000
SD098T3	ES-2 DB STORAGE TANK	6419, 106.472/09/04/2000
SD098T4	ES-2 DB STORAGE TANK	6419, 106.472/09/04/2000
SD098T5	ES-2 DP STORAGE TANK	6419, 106.472/09/04/2000
SD098T6	ES-2 EEH STORAGE TANK	6419, 106.472/09/04/2000
SD098T7	ES-2 DTB STORAGE TANK	6419, 106.472/09/04/2000
SD098T8	ES-2 DTE STORAGE TANK	6419, 106.472/09/04/2000
SD099T14	ES-2 EB STORAGE TANK	6419, 106.472/09/04/2000
SD099T15	ES-2 EB STORAGE TANK	6419, 106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
SD101T21	ES-2 EEH STORAGE TANK	106.472/09/04/2000

Appendix A

Acronym List 88

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Message

From: Donna Williams [donna.williams@tceq.texas.gov]
Sent: 4/24/2017 2:27:22 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Mike Wilson [mike.wilson@tceq.texas.gov]; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Tan Nguyen [Tan.Nguyen@tceq.texas.gov]; Alfredo Mendoza [alfredo.mendoza@tceq.texas.gov]
Subject: Texas Notification Report
Attachments: EPA_20170424.rtf; O1022_WILSONART LLC_SOB.docx; O1022_WILSONART LLC_SOP.docx; O1288_TEXAS MEDICAL CENTER CENTRAL HEATING AND COOLING SERVICES CORPORATION_SOB.docx; O1288_TEXAS MEDICAL CENTER CENTRAL HEATING AND COOLING SERVICES CORPORATION_SOP.pdf; O1320_HUNTSMAN PETROCHEMICAL LLC_SOB.docx; O1320_HUNTSMAN PETROCHEMICAL LLC_SOP.docx; O1447_TOTAL PETROCHEMICALS & REFINING USA INC_SOB.docx; O1447_TOTAL PETROCHEMICALS & REFINING USA INC_SOP.docx; O1914_UNION CARBIDE CORPORATION_SOB.docx; O1914_UNION CARBIDE CORPORATION_SOP.docx; O2065_LUMINANT GENERATION COMPANY LLC_SOB.docx; O2065_LUMINANT GENERATION COMPANY LLC_SOP.pdf; O2233_ROHM AND HAAS TEXAS INCORPORATED_SOB.docx; O2233_ROHM AND HAAS TEXAS INCORPORATED_SOP.pdf; O2407_GEORGIA-PACIFIC WOOD PRODUCTS SOUTH LLC_LTR.pdf; O2407_GEORGIA-PACIFIC WOOD PRODUCTS SOUTH LLC_SOB.docx; O2906_CHEVRON USA INC_SOP.docx; O2906_CHEVRON USA INC_SOB.docx; O3620_WTG SONORA GAS PLANT LLC_SOP.pdf; O3620_WTG SONORA GAS PLANT LLC_SOB.docx; O54_LUMINANT GENERATION COMPANY LLC_SOP.pdf; O54_LUMINANT GENERATION COMPANY LLC_SOB.docx

Significant Revision Projects:
O2233 - ROHM AND HAAS TEXAS INCORPORATED

Minor Revision Projects:
O1320 - HUNTSMAN PETROCHEMICAL LLC
O2065 - LUMINANT GENERATION COMPANY LLC
O2407 - GEORGIA-PACIFIC WOOD PRODUCTS SOUTH LLC
O3620 - WTG SONORA GAS PLANT LLC

Renewal Projects:
O1022 - WILSONART LLC
O1288 - TEXAS MEDICAL CENTER CENTRAL HEATING AND COOLING SERVICES CORPORATION
O1447 - TOTAL PETROCHEMICALS & REFINING USA INC
O1914 - UNION CARBIDE CORPORATION
O2906 - CHEVRON USA INC
O54 - LUMINANT GENERATION COMPANY LLC

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Huntsman Petrochemical LLC

Site Name: Huntsman Port Neches
Area Name: F and G Units
Physical Location: 2701 Spur 136
Nearest City: Port Neches
County: Jefferson

Permit Number: O1320
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: April 21, 2017

Operating Permit
Basis of Determination

Description of Revisions
A federal operating permit (FOP) minor revision application for Huntsman Petrochemical, LLC, F and G units was received by the TCEQ on 8/24/2016. As a result of the minor revision, the changes made to the FOP include the addition of boilers/steam generating units, storage tanks, fugitive unit, stationary/process vents, distillation units and chemical manufacturing process units. These units are subject to MACT DDDDD, 30 TAC Chapter 115, Storage of VOCs, NSPS Dc, 30 TAC Chapter 117, Subchapter B, 30 TAC Chapter 115, Subchapter D, MACT H, NSPS VVa, 30 TAC Chapter 111, Visible Emissions, 30 TAC Chapter 115, Vent Gas Controls, MACT G, NSPS NNN & MACT F, and the requirements are identified in the FOP. Some of the units are subject to additional monitoring under 30 TAC Chapter 115, Vent Gas Control and the requirements are identified in the FOP. NSR Permit No. 106169 was incorporated into the FOP, the special terms and conditions were revised, and NSR Permit Nos. 647B & 5807A were removed.

Permit Area Process Description
[SEQ CHAPTER \h \r 1]Ethylene oxide is produced by reacting ethylene and oxygen over a silver impregnated catalyst (catalytic partial oxidation of ethylene). The ethylene oxide is then reacted with water to produce mono-, di- and tri-ethylene glycols.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O2286, O2287, O2288, O3056

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO_2, NO_x, HAPs, CO, GHG

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements

    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for

large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests

that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility
When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
F4TF41	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
F6TF61	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
F6TF6101	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
F-F6-147	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-F6-147	40 CFR Part 63, Subpart G	63GT-037	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C.

Unit ID	Regulation	Index Number	Basis of Determination*
			Emission Control Type = Closed vent system (CVS) and control device (fixed roof) Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%. Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).
F-F6-148	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-F6-148	40 CFR Part 63, Subpart G	63GT-037	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C. Emission Control Type = Closed vent system (CVS) and control device (fixed roof) Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%. Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).
F-F6-149	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-F6-149	40 CFR Part 63, Subpart G	63GT-037	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G

Unit ID	Regulation	Index Number	Basis of Determination*
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C. Emission Control Type = Closed vent system (CVS) and control device (fixed roof) Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%. Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).
F-F6-150	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-F6-150	40 CFR Part 63, Subpart G	63GT-037	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C. Emission Control Type = Closed vent system (CVS) and control device (fixed roof) Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%. Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).
F-P-136	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-P-137	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-P-138	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Direct-flame incinerator
F-P-138	40 CFR Part 63, Subpart G	63GT-037	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C. Emission Control Type = Closed vent system (CVS) and control device (fixed roof) Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%. Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).
F-P-139	30 TAC Chapter 115, Storage of VOCs	R5112-009	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type = Direct-flame incinerator
F-P-139	40 CFR Part 63, Subpart G	63GT-037	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. Hard Piping = The closed vent system is constructed of hard piping. Bypass Lines = Closed vent system has by-pass lines that are sealed with a carseal or lock and key mechanism Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is greater than or equal to 11.11 psi (76.6 kPa) Control Device Type = Enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C. Emission Control Type = Closed vent system (CVS) and control device (fixed roof) Control Device Design = The control device was not installed on or before December 31, 1992 or was not designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%. Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).
G1TG1100	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G1TG1100	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G1TG15	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G1TG15	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G1TG16	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G1TG16	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G1TG196	30 TAC Chapter 115, Storage of VOCs	R5122-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
G1TG196	40 CFR Part 60, Subpart Kb	60Kb-4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
G2TG2111	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G2TG2111	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G2TG2112	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G2TG2112	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G2TG2138	30 TAC Chapter 115, Storage of	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G2TG2138	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G2TG215	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G2TG215	40 CFR Part 60, Subpart Kb	60Kb-3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
G2TG216	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G2TG216	40 CFR Part 60, Subpart Kb	60Kb-3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
G2TG217	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G2TG217	40 CFR Part 60, Subpart Kb	60Kb-3	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)
G3TG31	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G3TG31	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G3TG311	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G3TG311	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G3TG312	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G3TG312	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G3TG32	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G3TG32	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G3TG38	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G3TG38	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG512	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G5TG512	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG513	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G5TG513	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG514	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G5TG514	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG515	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G5TG515	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG519	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G5TG519	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG520	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G5TG520	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
G5TG55	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G5TG55	40 CFR Part 60, Subpart Kb	60Kb-4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
G5TG56	30 TAC Chapter 115, Storage of	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
G5TG56	40 CFR Part 60, Subpart Kb	60Kb-4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
G6TG61	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
G6TG61	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
GRPFGTK1	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
GRPFGTK1	40 CFR Part 60, Subpart Kb	60Kb-22	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
GRPFGTK2	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
GRPFGTK3	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
GRPFGTK3	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
GRPFGTK4	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
GRPFGTK4	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET01	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
RSET01	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET0121	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET0121	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET0132	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET0132	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET0162	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET0162	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET0176	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
RSET0176	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET0177	30 TAC Chapter 115, Storage of VOCs	R5112-00a	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
RSET0177	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET0186	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET0186	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET02	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
RSET02	40 CFR Part 60, Subpart Kb	60Kb-4	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia
RSET0201	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET0201	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET025	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET025	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET035	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET035	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET036	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET036	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET037	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET037	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET038	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET038	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET05	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET05	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET059	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET059	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET06	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET06	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET060	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET060	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET076	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET076	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET078	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET078	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET085	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET085	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET086	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSET086	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSET095	30 TAC Chapter 115, Storage of VOCs	R5112-00g	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
RSET095	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSETO178	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
RSETO178	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
T-F8-101	30 TAC Chapter 115, Storage of VOCs	R5112-F8-101	Construction Date = On or after May 12, 1973 Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
T-F8-101	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
T-F8-104	30 TAC Chapter 115, Storage of VOCs	R5112-F8-104	Construction Date = On or after May 12, 1973 Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
T-G3-9	30 TAC Chapter 115, Storage of VOCs	R5112-00c	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
T-G3-9	40 CFR Part 63, Subpart G	63GT-043	MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.
RSELDS	40 CFR Part 63, Subpart Y	63Y-005	Subpart Y Facility Type = Existing onshore loading terminal (located onshore or less than 0.5 miles from shore). Ballasting Operations = Operations other than or in addition to ballasting operations are performed at the facility. Vapor Pressure = Vapor pressure is greater than or equal to 10.3 kilopascals (1.5 psia) at standard conditions, 20° C and 760 mm Hg. Subpart BB Applicability = Marine vessel loading operations are not subject to and complying with 40 CFR Part 61, Subpart BB. Material Loaded = Material other than crude oil or gasoline. HAP Impurities Only = Marine vessel loading operations at loading berths transfer liquids containing organic hazardous air pollutants other than as impurities. Source Emissions = Source with emissions less than 10 and 25 tons.
RSELRBMTC	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
RSELRBMTC	40 CFR Part 63, Subpart G	63GL-0g2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
RSELRBMTD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
RSELRBMTD	40 CFR Part 63, Subpart G	63GL-0g2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
RSELRBMTW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.

Unit ID	Regulation	Index Number	Basis of Determination*
RSELRBMTW	40 CFR Part 63, Subpart G	63GL-0g2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
RSELRPRDC	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-00k	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Pressurized loading system.
RSELRPRDC	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
RSELRPRDC	40 CFR Part 63, Subpart G	63GL-0g2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
RSELRTRKW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-00c	Chapter 115 Control Device Type = No control device. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading greater than or equal to 20,000 gallons per day. Control Options = Vapor balance system.
RSELRTRKW	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-018	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading.

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure less than 0.5 psia.
RSELRTRKW	40 CFR Part 63, Subpart G	63GL-0g2a	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111). Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
F8-BOIL	30 TAC Chapter 117, Subchapter B	R7201-F8	Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. Functionally Identical Replacement = Unit is not a functionally identical replacement.
F8-BOIL	40 CFR Part 60, Subpart Dc	60DC-1	Construction/Modification Date = After February 28, 2005. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). Technology Type = None. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner.
F8-BOIL	40 CFR Part 63, Subpart DDDDD	63DDDDD-1	Construction/Reconstruction Date = Construction or reconstruction began after June 4, 2010. HEAT INPUT CAPACITY = RATED HEAT INPUT CAPACITY OF GREATER THAN 10 MMBTU/HR BUT LESS THAN 100 MMBTU/HR
F4FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
F4FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
F6FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
F6FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.

Unit ID	Regulation	Index Number	Basis of Determination*
F8-FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
F8-FUG	40 CFR Part 60, Subpart VVa	VVA-1	Produces Chemicals = The facility produces, as an intermediate or final product, one or more of the chemicals listed in 40 CFR § 60.489a. Affected Facility = The facility is an affected facility as defined in 40 CFR § 60.480a(a)(2). Construction/Modification Date = After November 7, 2006. Compliance Option = Choosing to comply with the provisions of 40 CFR Part 63, Subpart H.
F8-FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
G1FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
G1FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
G2FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
G2FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
G3FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
G3FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
G4FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
G4FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
G5FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
G5FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
G6FUG	30 TAC Chapter	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Pet. Refinery & Petrochemicals		TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
G6FUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
GRPFGFU1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
GRPFGFU1	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
RSEFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
RSEFUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
F4FF4135	30 TAC Chapter 115, Vent Gas Controls	R5121-10	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F4FF4135	40 CFR Part 63, Subpart G	63GV-100	Control Device = No recovery device. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is not needed to determine applicability. Flow Rate = Flow rate is not needed to determine applicability.

Unit ID	Regulation	Index Number	Basis of Determination*
			Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
F6FF6104	30 TAC Chapter 115, Vent Gas Controls	R5121-10	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F6FF6104	40 CFR Part 63, Subpart G	63GV-100	Control Device = No recovery device. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is not needed to determine applicability. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
F8-RGN	30 TAC Chapter 111, Visible Emissions	R1111-F8-9	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.

Unit ID	Regulation	Index Number	Basis of Determination*
F8-RGN	30 TAC Chapter 115, Vent Gas Controls	R5121-F8-9	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F8-RGN	40 CFR Part 63, Subpart G	63G-F8-9	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = No recovery device. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Halogenated = Vent stream is not halogenated. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is greater than or equal to 50 ppm. Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate. Electing Control = Not electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) or (a)(2). NSPS TRE Index Value = TRE index value is greater than 1 and less than 4 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = No previous performance test was conducted. MACT TRE Index Value = TRE index value is greater than 1.0 and less than or equal to 4.0 as calculated using the procedures of 40 CFR § 63.115(d).
FC4300	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter

Unit ID	Regulation	Index Number	Basis of Determination*
			B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
FC4300	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
FC6300	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.

Unit ID	Regulation	Index Number	Basis of Determination*
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
FC6300	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-135	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-135	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and

Unit ID	Regulation	Index Number	Basis of Determination*
			63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-142	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-142	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-33	30 TAC Chapter 115, Vent Gas	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC

Unit ID	Regulation	Index Number	Basis of Determination*
	Controls		Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-33	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-45	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than

Unit ID	Regulation	Index Number	Basis of Determination*
			1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-45	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-54	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-54	40 CFR Part 63,	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart G		alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-56	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-56	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device.

Unit ID	Regulation	Index Number	Basis of Determination*
			Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-57	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-57	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-81	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.

Unit ID	Regulation	Index Number	Basis of Determination*
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-81	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-82	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).

Unit ID	Regulation	Index Number	Basis of Determination*
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-82	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-83	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-83	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR

Unit ID	Regulation	Index Number	Basis of Determination*
			Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F4-84	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-84	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.

Unit ID	Regulation	Index Number	Basis of Determination*
F-F4-88	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F4-88	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-104	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is

Unit ID	Regulation	Index Number	Basis of Determination*
			greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-104	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-105	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than

Unit ID	Regulation	Index Number	Basis of Determination*
			1.0 without the use of VOC emission control devices.
F-F6-105	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-106	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-106	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.

Unit ID	Regulation	Index Number	Basis of Determination*
			Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-126	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-126	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-33	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.

Unit ID	Regulation	Index Number	Basis of Determination*
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-33	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-44	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-44	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-45	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-45	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-54	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-54	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line.

Unit ID	Regulation	Index Number	Basis of Determination*
			Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-56	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-56	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-84	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter

Unit ID	Regulation	Index Number	Basis of Determination*
			B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-84	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-85	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.

Unit ID	Regulation	Index Number	Basis of Determination*
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-85	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-86	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-86	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and

Unit ID	Regulation	Index Number	Basis of Determination*
			63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-87	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-87	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-88	30 TAC Chapter 115, Vent Gas	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC

Unit ID	Regulation	Index Number	Basis of Determination*
	Controls		Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-88	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-F6-95	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than

Unit ID	Regulation	Index Number	Basis of Determination*
			1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-F6-95	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F-G1-106	30 TAC Chapter 115, Vent Gas Controls	R5121-10	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = No control device Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. VOC Concentration = VOC concentration is less than 612 ppmv.
F-G3-18	30 TAC Chapter	R5121-9	Alternate Control Requirement = Alternate control is not used.

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.
F-G3-18	40 CFR Part 63, Subpart G	63GV-100	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. NSPS TRE Index Value = TRE index value is greater than 8 as calculated using the appropriate equation from 40 CFR Part 60, Subparts III, NNN or RRR. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance. MACT TRE Index Value = TRE index value is greater than 4.0 as calculated using the procedures of 40 CFR § 63.115(d). Plant Type = Vinyl chloride plant.
F-G4-3	30 TAC Chapter 115, Vent Gas Controls	R5121-10	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.

Unit ID	Regulation	Index Number	Basis of Determination*
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies one of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. VOC Concentration = VOC concentration is less than 612 ppmv.
F-G4-5	30 TAC Chapter 115, Vent Gas Controls	R5121-10	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is less than 0.011 scm/min or the VOC concentration is less than 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-G6-11	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least

Unit ID	Regulation	Index Number	Basis of Determination*
			1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
F-G6-11	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
GRPFGVE3	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
GRPFGVE3	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator.

Unit ID	Regulation	Index Number	Basis of Determination*
			Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
GRPFGVE4	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
GRPFGVE4	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results

Unit ID	Regulation	Index Number	Basis of Determination*
			reliably indicate compliance.
GRPFGVE5	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
GRPFGVE5	40 CFR Part 63, Subpart G	63GV-082N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
GRPFGVE6	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter

Unit ID	Regulation	Index Number	Basis of Determination*
			B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
GRPFGVE6	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
V-F8-BOIL	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or

Unit ID	Regulation	Index Number	Basis of Determination*
			distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-13	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-13	40 CFR Part 63, Subpart G	63G-F8-N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Boiler or process heater with a design heat input capacity of less than or equal to 44 MW. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value Performance Test = No previous performance test was conducted.

Unit ID	Regulation	Index Number	Basis of Determination*
V-F-F8-13-1	30 TAC Chapter 115, Vent Gas Controls	R5121-F8-EMERG	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-13-2	30 TAC Chapter 115, Vent Gas Controls	R5121-F8-EMERG	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-23	30 TAC Chapter 115, Vent Gas	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC

Unit ID	Regulation	Index Number	Basis of Determination*
	Controls		Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-3	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-3	40 CFR Part 63, Subpart G	63G-F8-N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Boiler or process heater with a design heat input capacity of less than or equal to 44 MW. Overlap = Title 40 CFR Part 60, Subpart NNN

Unit ID	Regulation	Index Number	Basis of Determination*
			Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value Performance Test = No previous performance test was conducted.
V-F-F8-32	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-6A	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is

Unit ID	Regulation	Index Number	Basis of Determination*
			greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-6A	40 CFR Part 63, Subpart G	63G-F8-N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Boiler or process heater with a design heat input capacity of less than or equal to 44 MW. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value Performance Test = No previous performance test was conducted.
V-F-F8-6B	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace

Unit ID	Regulation	Index Number	Basis of Determination*
			combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-F-F8-6B	40 CFR Part 63, Subpart G	63G-F8-N	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Boiler or process heater with a design heat input capacity of less than or equal to 44 MW. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.662. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value Performance Test = No previous performance test was conducted.
V-F-F8-8	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following

Unit ID	Regulation	Index Number	Basis of Determination*
			requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-R-F8-1	30 TAC Chapter 115, Vent Gas Controls	R5121-F8	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-R-F8-1	40 CFR Part 63, Subpart G	63G-F8-R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Boiler or process heater with a design heat input capacity of less than or equal to 44 MW. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent is a Group 2 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. Regulation = Owner or operator is electing to comply with the associated monitoring, testing, recordkeeping, and reporting requirements of 40 CFR Part 60, Subpart III, supporting the control requirements of 40 CFR § 60.702. HAP Concentration = HAP concentration is not needed to determine applicability. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Flow Rate = Flow rate is not needed to determine applicability. Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value Performance Test = No previous performance test was conducted.
V-R-F8-2	30 TAC Chapter 115, Vent Gas	R5121-2	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC

Unit ID	Regulation	Index Number	Basis of Determination*
	Controls		Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv. 40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10. 40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
V-R-F8-2	40 CFR Part 63, Subpart G	63GV-082R	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart RRR Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.
F4FF4135	40 CFR Part 60, Subpart NNN	60NNN-008a	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).
F6FF6104	40 CFR Part 60, Subpart NNN	60NNN-008a	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983.

Unit ID	Regulation	Index Number	Basis of Determination*
			Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).
F-F8-9	40 CFR Part 60, Subpart NNN	60NNN-F8-9	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved through use of a flare or recovery device. Subpart NNN Control Device = Boiler or process heater design heat input capacity less than 44 MW (150 MMBtu/hr). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
F-G4-3	40 CFR Part 60, Subpart NNN	60NNN-033a	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value greater than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. Vent Type = A single distillation unit discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).
GRPFGPRO1	40 CFR Part 63, Subpart F	63F-009	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

Unit ID	Regulation	Index Number	Basis of Determination*
PROF8HON	40 CFR Part 63, Subpart F	63F-009	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 106169	Issuance Date: 09/23/2013
Authorization No.: 36646	Issuance Date: 02/18/2010
Authorization No.: 5952A	Issuance Date: 02/18/2010
Authorization No.: 5972A	Issuance Date: 02/18/2010
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000
Number: 51	Version No./Date: 09/13/1993
Number: 51	Version No./Date: 10/04/1995

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: GRPFGVE3	
Control Device ID No.: F4HF41	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1704 degree Fahrenheit while waste gas is vented to the incinerator.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: GRPFGVE4	
Control Device ID No.: F4HF41	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1704 degree Fahrenheit while waste gas is vented to the incinerator.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: GRPFGVE5	
Control Device ID No.: F6HF61	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1737 degree Fahrenheit while waste gas is vented to the incinerator.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: GRPFGVE6	
Control Device ID No.: F6HF61	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1737 degree Fahrenheit while waste gas is vented to the incinerator.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-R-F8-2	
Control Device ID No.: F6HF61	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1737 degree Fahrenheit while waste gas is vented to the incinerator.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: F8-RGN	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-F8-9
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: It is a deviation if visible emissions are observed.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations . The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: V-F8-BOIL	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-13	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-13-1	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8-EMERG
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Valve's position open or closed.	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: It is a deviation if the valve positioner instrument detects the valve in the open position.	
Basis of monitoring: A Data Collection System (DCS) system with an alarm is used by Huntsman to monitor flow through the emergency vent. The DCS keeps continuous records of the valve that controls flow through the emergency vent using monitoring data from a valve positioner instrument. The valve on the emergency vent is closed during normal operations, however it may open during an upset condition. When the valve is in the closed position, no emissions are being routed to the atmosphere which assures compliance with 30 TAC §115.121(a)(1) which requires no VOCs to be emitted from a process vent unless the emissions are properly controlled in accordance with 30 TAC §115.122(a)(2). Any data that shows the valve in the open position shall be reported as a deviation since emissions are being routed through the vent uncontrolled.	

Unit/Group/Process Information	
ID No.: V-F-F8-13-2	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8-EMERG
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Valve's position open or closed.	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: It is a deviation if the valve positioner instrument detects the valve in the open position.	
Basis of monitoring: A Data Collection System (DCS) system with an alarm is used by Huntsman to monitor flow through the emergency vent. The DCS keeps continuous records of the valve that controls flow through the emergency vent using monitoring data from a valve positioner instrument. The valve on the emergency vent is closed during normal operations, however it may open during an upset condition. When the valve is in the closed position, no emissions are being routed to the atmosphere which assures compliance with 30 TAC §115.121(a)(1) which requires no VOCs to be emitted from a process vent unless the emissions are properly controlled in accordance with 30 TAC §115.122(a)(2). Any data that shows the valve in the open position shall be reported as a deviation since emissions are being routed through the vent uncontrolled.	

Unit/Group/Process Information	
ID No.: V-F-F8-23	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-3	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-32	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-6A	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-6B	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-F-F8-8	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: V-R-F8-1	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes

OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Huntsman Petrochemical LLC

AUTHORIZING THE OPERATION OF
Huntsman Port Neches
F and G Units
Industrial Organic Chemicals

LOCATED AT
Jefferson County, Texas
Latitude 29° 58' 5" Longitude 93° 55' 35"
Regulated Entity Number: RN100219252

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1320 Issuance Date: October 21, 2014

[ADVANCE \x 144]For the Commission

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subparts F, G, H, Y and DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § § 113.110, 113.120, 113.130, 113.300 and 113.1130 respectively which incorporate the 40 CFR Part 63 Subparts by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the

air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the

source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

4. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:

A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks

(iii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)

(v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(x) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(xi) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)

(xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiv) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xvi) Title 30 TAC § 115.547(4) (relating to Exemptions)

B. For the degassing of all transport vessels with a nominal capacity of 8,000 gallons or more, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) and (d) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.

(iii) Title 30 TAC § 115.542(b), (c) and (e) (relating to Control Requirements)

(iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(viii) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(ix) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(x) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xi) Title 30 TAC § 115.545(1) - (11) and (13) (relating to Approved Test Methods)

(xii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiii) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xiv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

C. For the degassing of VOC marine vessels with a nominal capacity of 420,000 gallons or more, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) and (e) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (4), (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used

(iii) Title 30 TAC § 115.542(b) , (c) and (f) (relating to Control Requirements)

(iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(viii) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(ix) Title 30 TAC § 115.544(b)(3), (b)(4) and (b)(6) (relating to Inspection, Monitoring, and Testing Requirements), for VOC concentration or lower explosive limit threshold monitoring

(x) Title 30 TAC § 115.544(c), and (c)(1) - (c)(3) (relating to Inspection, Monitoring, and Testing Requirements), for testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xi) Title 30 TAC § 115.545(1) - (7), and (9) - (13) (relating to Approved Test Methods)

(xii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiii) Title 30 TAC § 115.546(a)(2) and (a)(2)(A) - (J) (relating to Recordkeeping and Notification Requirements), for recordkeeping (as appropriate to the control device)

(xiv) Title 30 TAC § 115.546(a)(4) (relating to Recordkeeping and Notification Requirements), for recordkeeping of testing of control devices used to comply with 30 TAC § 115.542(a)(1)

(xv) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification

D. For the degassing of VOC marine vessels that have sustained damage which prevents a cargo tank's opening from being properly secured, the onboard vapor recovery system to be inoperative, or the pressure/vacuum relief valves from operating within certified limits as specified by a classification society or flag state, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.544(a), (a)(1) and (a)(2) (relating to Inspection, Monitoring and Inspection Requirements)

(ii) Title 30 TAC § 115.547(5) (relating to Exemptions)

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 61.05 (relating to Prohibited Activities)

B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)

C. Title 40 CFR § 61.09 (relating to Notification of Start-up)

D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)

E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)

F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)

G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)

H. Title 40 CFR § 61.15 (relating to Modification)

I. Title 40 CFR § 61.19 (relating to Circumvention)

7. For facilities where total annual benzene quantity from waste is less than 1 megagram per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:

A. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(5)(i) - (ii), (a)(6), (b), and (c)(1) - (3) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures

B. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)

C. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)

D. Title 40 CFR § 61.357(a), and (b) (relating to Reporting Requirements)

8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

9. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

10. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

    A. Title 40 CFR § 63.132(a), (a)(1), and (a)(1)(i) (relating to Process Wastewater Provisions - General)

    B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

    C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

11. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

    A. General Leak Detection Requirements:

        (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

        (ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

        (iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

        (iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

    B. For closed vent system or vapor collection systems constructed of hard piping:

        (i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements

        (ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements

12. For the operations pertaining to the loading and unloading of marine tank vessels specified in 40 CFR Part 63, Subpart Y, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.300 incorporated by reference):

    A. Title 40 CFR § 63.560(c) (relating to Designation of Affected Source), for applicability of the General Provisions of Subpart A

    B. Title 40 CFR § 63.563(a)(4) (relating to Compliance and Performance Testing), for vapor tightness requirements of the marine vessels

    C. Title 40 CFR § 63.564(a)(1) and (d) (relating to Monitoring Requirements)

D. Title 40 CFR § 63.565(a) (relating to Test Methods and Procedures), for performance testing requirements

E. Title 40 CFR § 63.565(c) (relating to Test Methods and Procedures), for vapor tightness requirements of the marine vessels

F. Title 40 CFR § 63.566 (relating to Construction and Reconstruction)

G. Title 40 CFR § 63.567(a) - (b) and (h) - (i) (relating to Reporting and Recordkeeping Requirements)

Additional Monitoring Requirements

13. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:

A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

E. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:

(i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or

(ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.

F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

14. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

15. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

16. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

17. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

18. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

19. Use of Emission Credits to comply with applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) Offsets for Title 30 TAC Chapter 116

    B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

        (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)

        (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

        (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)

        (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

        (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

20. Use of Discrete Emission Credits to comply with the applicable requirements:

    A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

        (i) Title 30 TAC Chapter 115

        (ii) Title 30 TAC Chapter 117

        (iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

21. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

22. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Permit Location

23. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

24. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 20

Applicable Requirements Summary 33

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F4FF4135	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-10	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F4FF4135	DISTILLATION OPERATIONS	N/A	60NNN-008a	40 CFR Part 60, Subpart NNN	No changing attributes.
F4FF4135	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63GV-100	40 CFR Part 63, Subpart G	No changing attributes.
F4TF41	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F6FF6104	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-10	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F6FF6104	DISTILLATION OPERATIONS	N/A	60NNN-008a	40 CFR Part 60, Subpart NNN	No changing attributes.
F6FF6104	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63GV-100	40 CFR Part 63, Subpart G	No changing attributes.
F6TF61	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F6TF6101	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F8-BOIL	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60DC-1	40 CFR Part 60, Subpart Dc	No changing attributes.
F8-BOIL	BOILERS/STEAM GENERATORS/STEAM	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	GENERATING UNITS				
F8-FUG	FUGITIVE EMISSION UNITS	N/A	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
F8-FUG	FUGITIVE EMISSION UNITS	N/A	VVA-1	40 CFR Part 60, Subpart VVa	No changing attributes.
F8-FUG	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
F8-RGN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-F8-9	30 TAC Chapter 111, Visible Emissions	No changing attributes.
F8-RGN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8-9	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F8-RGN	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-F8-9	40 CFR Part 63, Subpart G	No changing attributes.
F-F6-147	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F-F6-147	STORAGE TANKS/VESSELS	N/A	63GT-037	40 CFR Part 63, Subpart G	No changing attributes.
F-F6-148	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F-F6-148	STORAGE TANKS/VESSELS	N/A	63GT-037	40 CFR Part 63, Subpart G	No changing attributes.
F-F6-149	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-F6-149	STORAGE TANKS/VESSELS	N/A	63GT-037	40 CFR Part 63, Subpart G	No changing attributes.
F-F6-150	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F-F6-150	STORAGE TANKS/VESSELS	N/A	63GT-037	40 CFR Part 63, Subpart G	No changing attributes.
F-F8-9	DISTILLATION OPERATIONS	N/A	60NNN-F8-9	40 CFR Part 60, Subpart NNN	No changing attributes.
F-G1-106	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-10	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-G3-18	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-9	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-G3-18	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63GV-100	40 CFR Part 63, Subpart G	No changing attributes.
F-G4-3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-10	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-G4-3	DISTILLATION OPERATIONS	N/A	60NNN-033a	40 CFR Part 60, Subpart NNN	No changing attributes.
F-G4-5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-10	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-P-136	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-P-137	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F-P-138	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F-P-138	STORAGE TANKS/VESSELS	N/A	63GT-037	40 CFR Part 63, Subpart G	No changing attributes.
F-P-139	STORAGE TANKS/VESSELS	N/A	R5112-009	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
F-P-139	STORAGE TANKS/VESSELS	N/A	63GT-037	40 CFR Part 63, Subpart G	No changing attributes.
G1TG196	STORAGE TANKS/VESSELS	N/A	R5122-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
G2TG215	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
G2TG216	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
G2TG217	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
G5TG55	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
G5TG56	STORAGE TANKS/VESSELS	N/A	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPFGFU1	FUGITIVE EMISSION UNITS	F4FUG, F6FUG, G1FUG, G2FUG, G3FUG, G4FUG, G5FUG, G6FUG, RSEFUG	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPFGFU1	FUGITIVE EMISSION UNITS	F4FUG, F6FUG, G1FUG, G2FUG, G3FUG, G4FUG, G5FUG, G6FUG, RSEFUG	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
GRPFGPRO1	CHEMICAL MANUFACTURING PROCESS	PROF4HON, PROF6HON, PROG1HON, PROG2HON, PROG3HON, PROG4HON, PROG5HON, PROG6HON, PRORSHON	63F-009	40 CFR Part 63, Subpart F	No changing attributes.
GRPFGTK1	STORAGE TANKS/VESSELS	RSET0133, RSET0137, RSET0157, RSET0158, RSET0159, RSET0168, RSET0181, RSET0182, RSET0202, RSET0203, RSET033, RSET034, RSET058	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPFGTK2	STORAGE TANKS/VESSELS	942009, 961588, 9690, F4TF47, F6TF64, G2TG21, G3TG33, G3TG34, G3TG35, G3TG36, G5TG53, G5TG57,	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		G5TG58			
GRPFGTK3	STORAGE TANKS/VESSELS	G1TG15, G1TG16, G2TG2111, G2TG2112, G2TG2138, G3TG31, G3TG312, G5TG519, G5TG520, RSET0176, RSET0177	R5112-00a	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPFGTK3	STORAGE TANKS/VESSELS	G1TG15, G1TG16, G2TG2111, G2TG2112, G2TG2138, G3TG31, G3TG312, G5TG519, G5TG520, RSET0176, RSET0177	63GT-043	40 CFR Part 63, Subpart G	No changing attributes.
GRPFGTK4	STORAGE TANKS/VESSELS	G1TG1100, G3TG311, G3TG32, G3TG38, G5TG512, G5TG513, G5TG514, G5TG515, G6TG61, RSET0121, RSET0132, RSET0162,	R5112-00c	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		RSET0186, RSET0201, RSET025, RSET035, RSET036, RSET037, RSET038, RSET05, RSET059, RSET06, RSET060, RSET076, RSET078, RSET085, RSET086, RSETO178, T-G3-9			
GRPFGTK4	STORAGE TANKS/VESSELS	G1TG1100, G3TG311, G3TG32, G3TG38, G5TG512, G5TG513, G5TG514, G5TG515, G6TG61, RSET0121, RSET0132, RSET0162, RSET0186, RSET0201, RSET025, RSET035, RSET036, RSET037, RSET038, RSET05, RSET059, RSET06,	63GT-043	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		RSET060, RSET076, RSET078, RSET085, RSET086, RSETO178, T-G3-9			
GRPFGVE3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	F-F4-135, F-F4-142, F-F4-33, F-F4-45, F-F4-54, F-F4-56, F-F4-57, F-F4-88	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPFGVE3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	F-F4-135, F-F4-142, F-F4-33, F-F4-45, F-F4-54, F-F4-56, F-F4-57, F-F4-88	63GV-082N	40 CFR Part 63, Subpart G	No changing attributes.
GRPFGVE4	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	FC4300, F-F4-81, F-F4-82, F-F4-83, F-F4-84	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPFGVE4	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	FC4300, F-F4-81, F-F4-82, F-F4-83, F-F4-84	63GV-082R	40 CFR Part 63, Subpart G	No changing attributes.
GRPFGVE5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	F-F6-104, F-F6-126, F-F6-33, F-F6-44, F-F6-45, F-F6-54, F-F6-56, F-F6-88, F-F6-95, F-G6-11	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPFGVE5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	F-F6-104, F-F6-126, F-F6-33, F-F6-44, F-F6-45, F-F6-54, F-F6-56, F-F6-88, F-F6-95, F-G6-11	63GV-082N	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPFGVE6	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	FC6300, F-F6-105, F-F6-106, F-F6-84, F-F6-85, F-F6-86, F-F6-87	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPFGVE6	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	FC6300, F-F6-105, F-F6-106, F-F6-84, F-F6-85, F-F6-86, F-F6-87	63GV-082R	40 CFR Part 63, Subpart G	No changing attributes.
PROF8HON	CHEMICAL MANUFACTURING PROCESS	N/A	63F-009	40 CFR Part 63, Subpart F	No changing attributes.
RSELDS	LOADING/UNLOADING OPERATIONS	N/A	63Y-005	40 CFR Part 63, Subpart Y	No changing attributes.
RSELRBMTC	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
RSELRBMTC	LOADING/UNLOADING OPERATIONS	N/A	63GL-0g2a	40 CFR Part 63, Subpart G	No changing attributes.
RSELRBMTD	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
RSELRBMTD	LOADING/UNLOADING OPERATIONS	N/A	63GL-0g2a	40 CFR Part 63, Subpart G	No changing attributes.
RSELRBMTW	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
RSELRBMTW	LOADING/UNLOADING OPERATIONS	N/A	63GL-0g2a	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
RSELRPRDC	LOADING/UNLOADING OPERATIONS	N/A	R5211-00k	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = No control device., Control Options = Pressurized loading system., Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
RSELRPRDC	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
RSELRPRDC	LOADING/UNLOADING OPERATIONS	N/A	63GL-0g2a	40 CFR Part 63, Subpart G	No changing attributes.
RSELRTRKW	LOADING/UNLOADING OPERATIONS	N/A	R5211-00c	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia., Daily Throughput = Loading greater than or equal to 20,000 gallons per day., Chapter 115 Control Device Type = No control device., Control Options = Vapor balance system., Vapor Tight = Not all liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					disconnected.
RSELRTRKW	LOADING/UNLOADING OPERATIONS	N/A	R5211-018	30 TAC Chapter 115, Loading and Unloading of VOC	True Vapor Pressure = True vapor pressure less than 0.5 psia.
RSELRTRKW	LOADING/UNLOADING OPERATIONS	N/A	63GL-0g2a	40 CFR Part 63, Subpart G	No changing attributes.
RSET01	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
RSET01	STORAGE TANKS/VESSELS	N/A	63GT-043	40 CFR Part 63, Subpart G	No changing attributes.
RSET02	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
RSET095	STORAGE TANKS/VESSELS	N/A	R5112-00g	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
RSET095	STORAGE TANKS/VESSELS	N/A	63GT-043	40 CFR Part 63, Subpart G	No changing attributes.
T-F8-101	STORAGE TANKS/VESSELS	N/A	R5112-F8-101	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
T-F8-101	STORAGE TANKS/VESSELS	N/A	63GT-043	40 CFR Part 63, Subpart G	No changing attributes.
T-F8-104	STORAGE TANKS/VESSELS	N/A	R5112-F8-104	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
V-F8-BOIL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-13	EMISSION	N/A	R5121-F8	30 TAC Chapter 115, Vent	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			Gas Controls	
V-F-F8-13	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-F8-N	40 CFR Part 63, Subpart G	No changing attributes.
V-F-F8-13-1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8-EMERG	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-13-2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8-EMERG	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-23	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-F8-N	40 CFR Part 63, Subpart G	No changing attributes.
V-F-F8-32	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-6A	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-6A	EMISSION POINTS/STATIONARY	N/A	63G-F8-N	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
V-F-F8-6B	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-F-F8-6B	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-F8-N	40 CFR Part 63, Subpart G	No changing attributes.
V-F-F8-8	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-R-F8-1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-F8	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-R-F8-1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G-F8-R	40 CFR Part 63, Subpart G	No changing attributes.
V-R-F8-2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
V-R-F8-2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63GV-082R	40 CFR Part 63, Subpart G	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F4FF4135	EP	R5121-10	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(D) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI distillation operation vent gas stream which meets the requirements of §60.660(c)(4) or §60.662(c) is exempt from the requirements of §115.121(a)(2)(A).	None	None	None
F4FF4135	EP	60NNN-008a	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l)(7) § 60.665(p)
F4FF4135	EP	63GV-100	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.110(d)(5)(ii) § 60.662(c) § 63.110(d)(5)(ii)(D) [G]§ 63.115(f)	If the Group 2 process vent has a TRE value greater than or equal to 1 as determined by the procedures in 40 CFR part 60 subpart NNN, the process vent is required to comply only with §63.110(d)(5)(ii)(A)-(D).	[G]§ 60.664(e) § 60.664(f) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2) [G]§ 63.115(a) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
F4TF41	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
F6FF6104	EP	R5121-10	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(D) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI distillation operation vent gas stream which meets the	None	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements of §60.660(c)(4) or §60.662(c) is exempt from the requirements of §115.121(a)(2)(A).			
F6FF6104	EP	60NNN-008a	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l)(7) § 60.665(p)
F6FF6104	EP	63GV-100	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.110(d)(5)(ii) § 60.662(c) § 63.110(d)(5)(ii)(D) [G]§ 63.115(f)	If the Group 2 process vent has a TRE value greater than or equal to 1 as determined by the procedures in 40 CFR part 60 subpart NNN, the process vent is required to comply only with §63.110(d)(5)(ii)(A)-(D).	[G]§ 60.664(e) § 60.664(f) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2) [G]§ 63.115(a) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
F6TF61	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
F6TF6101	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						division.			
F8-BOIL	EU	60DC-1	SO_2	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
F8-BOIL	EU	60DC-1	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
F8-BOIL	EU	60DC-1	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
F8-BOIL	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63,	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					equipment specification requirements of 40 CFR Part 63, Subpart DDDDD		Subpart DDDDD		
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
F8-FUG	EU	R5352-	VOC	30 TAC Chapter	§ 115.357(10)	Instrumentation systems,	None	§ 115.356	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals		as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.		§ 115.356(3) [G]§ 115.356(3)(C)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§115.356(3)(C).			
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.358(f)		
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(3)(C) § 115.356(5)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
F8-FUG	EU	R5352-	VOC	30 TAC Chapter	§ 115.352(1)(A)	No open-ended valves or	§ 115.354(1)	§ 115.352(7)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10)	No agitators shall be allowed to have a VOC leak, for more than 15	§ 115.354(1) § 115.354(10) § 115.354(5)	§ 115.352(7) § 115.354(10) § 115.356	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) §	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	methane, or the dripping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-	VOC	30 TAC Chapter	§ 115.352(1)(B)	No compressor seals	§ 115.354(1)	§ 115.352(7)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.			
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
F8-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.357(12) § 115.357(8)				
F8-FUG	EU	VVA-1	VOC	40 CFR Part 60, Subpart VVa	§ 60.480a(e)(2)(i) § 60.480a(e)(2)(ii) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Owners or operators may choose to comply with the provisions of 40 CFR Part 63, Subpart H, to satisfy the requirements of §§60.482-1a through 60.487a for an affected facility. When choosing to comply with 40 CFR Part 63, Subpart H, the requirements of §60.485a(d), (e), and (f), and §60.486a(i) and (j) still apply.	[G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.486a(i) § 60.486a(i)(1) § 60.486a(i)(2) § 60.486a(i)(3)	None
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g)	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				§ 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g)	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(h) [G]§ 63.171				[G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F8-FUG	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F8-RGN	EP	R1111-F8-9	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
F8-RGN	EP	R5121-F8-9	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(D) § 115.127(a)(4)	Any distillation operation vent gas stream which meets the requirements of 40 Code of Federal Regulations (CFR) §60.660(c)(4) or §60.662(c) (concerning Subpart NNN - Standards of Performance for VOC Emissions From SOCMI Distillation Operations, December 14, 2000) is exempt from the requirements of §115.121(a)(2)(A) of this title.	None	None	None
F8-RGN	EP	63G-F8-9	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.110(d)(5)(ii) § 63.110(d)(5)(ii)(C) [G]§ 63.115(f)	If the Group 2 process vent has a TRE value greater than or equal to 1 as determined by the procedures in 40 CFR part 60 subpart NNN, the process vent is required to comply only with §63.110(d)(5)(ii)(A)-(D).	§ 63.114(c) § 63.114(e) [G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	[G]§ 63.152(a)	§ 63.114(c) § 63.114(e) § 63.115(e)(2) § 63.117(e) § 63.117(f) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) § 63.151(e)(5)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.151(f) § 63.151(f)(1) § 63.151(f)(2) § 63.151(f)(3) § 63.151(h) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii) [G]§ 63.152(c)(6)
F-F6-147	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-F6-147	EU	63GT-037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(f)(2) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.120(d)(1)(i) § 63.120(d)(1)(i)(A) § 63.120(d)(1)(i)(B) § 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2)	§ 63.120(d)(1) § 63.120(d)(2) § 63.120(d)(2)(i) § 63.120(d)(2)(ii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.148(i)(3)(ii) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	[G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
F-F6-148	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-F6-148	EU	63GT-037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(f)(2) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.120(d)(1)(i) § 63.120(d)(1)(i)(A) § 63.120(d)(1)(i)(B) § 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2)	§ 63.120(d)(1) § 63.120(d)(2) § 63.120(d)(2)(i) § 63.120(d)(2)(ii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.148(i)(3)(ii) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	[G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
F-F6-149	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-F6-149	EU	63GT-037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(f)(2) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.120(d)(1)(i) § 63.120(d)(1)(i)(A) § 63.120(d)(1)(i)(B) § 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2)	§ 63.120(d)(1) § 63.120(d)(2) § 63.120(d)(2)(i) § 63.120(d)(2)(ii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.148(i)(3)(ii) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	[G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
F-F6-150	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-F6-150	EU	63GT-037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(f)(2) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.120(d)(1)(i) § 63.120(d)(1)(i)(A) § 63.120(d)(1)(i)(B) § 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2)	§ 63.120(d)(1) § 63.120(d)(2) § 63.120(d)(2)(i) § 63.120(d)(2)(ii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								§ 63.148(i)(3)(ii) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	[G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
F-F8-9	EP	60NNN-F8-9	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	Affected facilities shall reduce TOC emissions by 98 weight-percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(c) § 60.663(c)(1) § 60.663(c)(2) § 60.664(a) § 60.664(b) § 60.664(b)(1) § 60.664(b)(2) § 60.664(b)(3) [G]§ 60.664(b)(4)	§ 60.663(c)(1) § 60.663(c)(2) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(b)(2)(ii) § 60.665(c) § 60.665(c)(3) § 60.665(c)(4) § 60.665(d)	§ 60.665(a) § 60.665(b) § 60.665(b)(2) § 60.665(b)(2)(i) § 60.665(b)(2)(ii) § 60.665(c) § 60.665(c)(3) § 60.665(c)(4) § 60.665(k) § 60.665(l) § 60.665(l)(1) § 60.665(l)(2)
F-G1-106	EP	R5121-10	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(C) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation vent gas stream with a flow rate < 0.011 scm/min (0.388	[G]§ 115.125 § 115.126(2) § 115.126(3)(D)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(D)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						scf/min) or a VOC concentration < 500 ppmv is exempt from §115.121(a)(2)(A).			
F-G3-18	EP	R5121-9	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(D) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI distillation operation vent gas stream which meets the requirements of §60.660(c)(4) or §60.662(c) is exempt from the requirements of §115.121(a)(2)(A).	None	None	None
F-G3-18	EP	63GV-100	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.113(e) [G]§ 63.115(f)	The owner or operator of a Group 2 process vent with a TRE index > 4.0 shall maintain a TRE index value > 4.0, comply with the sections as specified.	[G]§ 63.115(a) [G]§ 63.115(b) [G]§ 63.115(c) [G]§ 63.115(d) § 63.115(e) § 63.115(e)(1) [G]§ 63.115(f)	§ 63.117(b) [G]§ 63.118(c) [G]§ 63.152(a)	§ 63.115(e)(2) [G]§ 63.118(g) [G]§ 63.118(h) [G]§ 63.118(k) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(i) § 63.152(c)(4)(ii) § 63.152(c)(4)(iii)
F-G4-3	EP	R5121-10	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(D) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI distillation operation vent gas stream which meets the requirements of	None	None	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						§60.660(c)(4) or §60.662(c) is exempt from the requirements of §115.121(a)(2)(A).			
F-G4-3	EP	60NNN-033a	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l)(7) § 60.665(p)
F-G4-5	EP	R5121-10	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(4)(C) [G]§ 115.122(a)(4) § 115.127(a)(4)	Any SOCMI reactor process or distillation operation vent gas stream with a flow rate < 0.011 scm/min (0.388 scf/min) or a VOC concentration < 500 ppmv is exempt from §115.121(a)(2)(A).	[G]§ 115.125 § 115.126(2) § 115.126(3)(D)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(D)	None
F-P-136	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-P-137	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-P-138	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-P-138	EU	63GT-037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(f)(2) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.120(d)(1)(i) § 63.120(d)(1)(i)(A) § 63.120(d)(1)(i)(B) § 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2) § 63.148(i)(3)(ii) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	§ 63.120(d)(1) § 63.120(d)(2) § 63.120(d)(2)(i) § 63.120(d)(2)(ii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1) [G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-P-139	EU	R5112-009	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(A) § 115.118(a)(5) § 115.118(a)(7)	None
F-P-139	EU	63GT-037	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(2) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(f)(2) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.120(d)(1)(i) § 63.120(d)(1)(i)(A) § 63.120(d)(1)(i)(B) § 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2) § 63.148(i)(3)(ii) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	§ 63.120(d)(1) § 63.120(d)(2) § 63.120(d)(2)(i) § 63.120(d)(2)(ii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1) [G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
G1TG196	EU	R5122-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
G2TG215	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
G2TG216	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
G2TG217	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
G5TG55	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
G5TG56	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						title.			
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRPFGFU1	EU	R5352-	VOC	30 TAC Chapter	§ 115.357(2)	Each pressure relief valve	None	§ 115.356	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		ALL		115, Pet. Refinery & Petrochemicals	§ 115.352(9)	equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).		§ 115.356(3) [G]§ 115.356(3)(C)	
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	None	None	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight,	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						smell, or sound.			
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	methane, or the dropping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery,	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2)	[G]§ 115.354(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						fluid based on sight, smell, or sound.			
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)	§ 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight,	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(7) § 115.357(3) § 115.357(8)	smell, or sound.			
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10)	No compressor seals shall be allowed to have a VOC leak, for more than	§ 115.354(1) § 115.354(10) § 115.354(2)	§ 115.352(7) § 115.354(10) § 115.356	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	[G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dropping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) §	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	methane, or the dropping or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
GRPFGFU1	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(g)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a)	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b)	§ 63.181(a) [G]§ 63.181(b)	[G]§ 63.182(a) [G]§ 63.182(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171		[G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c)	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171			[G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c)	Standards: Agitators gas/vapor service and in light liquid service.	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	§63.173(a)-(j).		[G]§ 63.181(d)	[G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGFU1	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a)	Standards: Valves in gas/vapor service and in	[G]§ 63.168 [G]§ 63.175	§ 63.181(a) [G]§ 63.181(b)	[G]§ 63.182(a) [G]§ 63.182(b)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	light liquid service. §63.168(a)-(j)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	§ 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRPFGPRO 1	PRO	63F-009	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
GRPFGTK1	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPFGTK2	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPFGTK3	EU	R5112-00a	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

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						vapor pressure less than 1.5 psia is exempt from the requirements of this division.			
GRPFGTK3	EU	63GT-043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
GRPFGTK4	EU	R5112-00c	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRPFGTK4	EU	63GT-043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
GRPFGVE3	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(2) § 115.122(a)(2) § 115.122(a)(2)(B)	No person may allow a vent gas stream to be emitted from the processes specified in §115.121(a)(2)(A)-(E), unless the vent gas stream is controlled properly in accordance with §115.122(a)(2).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRPFGVE3	EP	63GV-082N	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(1)(i) § 63.114(d)(1) § 63.114(e) [G]§ 63.115(f)	§ 63.114(a)(1) § 63.114(d)(1) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
GRPFGVE4	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(2) § 115.122(a)(2) § 115.122(a)(2)(B)	No person may allow a vent gas stream to be emitted from the processes specified in §115.121(a)(2)(A)-(E), unless the vent gas stream is controlled properly in accordance with §115.122(a)(2).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
GRPFGVE4	EP	63GV-082R	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less	§ 63.114(a) § 63.114(a)(1)(i) § 63.114(d)(1) § 63.114(e) [G]§ 63.115(f)	§ 63.114(a)(1) § 63.114(d)(1) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3)	§ 63.114(e) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) § 63.118(f)(3)

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						stringent or as specified. §63.113(a)(2)(i)-(ii)		[G]§ 63.152(a) [G]§ 63.152(f)	[G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
GRPFGVE5	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(2) § 115.122(a)(2) § 115.122(a)(2)(B)	No person may allow a vent gas stream to be emitted from the processes specified in §115.121(a)(2)(A)-(E), unless the vent gas stream is controlled properly in accordance with §115.122(a)(2).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
GRPFGVE5	EP	63GV-082N	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(1)(i) § 63.114(d)(1) § 63.114(e) [G]§ 63.115(f)	§ 63.114(a)(1) § 63.114(d)(1) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3)

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									[G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
GRPFGVE6	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121(a)(2) § 115.122(a)(2) § 115.122(a)(2)(B)	No person may allow a vent gas stream to be emitted from the processes specified in §115.121(a)(2)(A)-(E), unless the vent gas stream is controlled properly in accordance with §115.122(a)(2).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
GRPFGVE6	EP	63GV-082R	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(1)(i) § 63.114(d)(1) § 63.114(e) [G]§ 63.115(f)	§ 63.114(a)(1) § 63.114(d)(1) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
PROF8HON	PRO	63F-009	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
RSELDS	EU	63Y-005	EXEMPT	40 CFR Part 63, Subpart Y	§ 63.560(a)(2) § 153.282 § 63.560(a)(4)	Existing sources with emissions less than 10 and 25 tons must meet the submerged fill standards of 46 CFR 153.282. This submerged fill requirement does not apply to petroleum refineries.	§ 63.565(l)	§ 63.567(j)(4)	None
RSELRBMTC	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RSELRBMT	EU	63GL-	112(B)	40 CFR Part 63,	§ 63.126(c)	For each Group 2 transfer	None	§ 63.130(f)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
C		0g2a	HAPS	Subpart G		rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.		§ 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	
RSELRBMTD	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RSELRBMTD	EU	63GL-0g2a	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
RSELRBMTW	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RSELRBMTW	EU	63GL-0g2a	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3)	§ 63.152(c)(4)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						transfer racks apply to the Group 2 transfer rack.		§ 63.130(f)(3)(i) § 63.130(f)(3)(ii)	
RSELRPRDC	EU	R5211-00k	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(C) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the following methods.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
RSELRPRDC	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RSELRPRDC	EU	63GL-0g2a	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
RSELRTRK	EU	R5211-	VOC	30 TAC Chapter	§ 115.212(a)(1)	At operations other than	§ 115.212(a)(3)(B)	§ 115.216	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
W		00c		115, Loading and Unloading of VOC	§ 115.212(a)(1)(B) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the following methods.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	
RSELRTRKW	EU	R5211-018	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
RSELRTRKW	EU	63GL-0g2a	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
RSET01	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						division.			
RSET01	EU	63GT-043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
RSET02	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
RSET095	EU	R5112-00g	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
RSET095	EU	63GT-043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
T-F8-101	EU	R5112-F8-101	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						the requirements of this division.			
T-F8-101	EU	63GT-043	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
T-F8-104	EU	R5112-F8-104	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
V-F8-BOIL	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-F-F8-13	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).			
V-F-F8-13	EP	63G-F8-N	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 60.662(a) § 63.113(b) § 63.113(h) [G]§ 63.115(f)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(3) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c)	§ 63.114(a)(3) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
V-F-F8-13-1	EP	R5121-F8-EMERG	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this	[G]§ 115.125 § 115.126(1) § 115.126(1)(C)	§ 115.126 § 115.126(1) § 115.126(1)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	§ 115.126(2) ** See Periodic Monitoring Summary	§ 115.126(2)	
V-F-F8-13-2	EP	R5121-F8-EMERG	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-F-F8-23	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-F-F8-3	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this	[G]§ 115.125 § 115.126(1) § 115.126(1)(C)	§ 115.126 § 115.126(1) § 115.126(1)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	§ 115.126(2) ** See Periodic Monitoring Summary	§ 115.126(2)	
V-F-F8-3	EP	63G-F8-N	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 60.662(a) § 63.113(b) § 63.113(h) [G]§ 63.115(f)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(3) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c)	§ 63.114(a)(3) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
V-F-F8-32	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-F-F8-6A	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-F-F8-6A	EP	63G-F8-N	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 60.662(a) § 63.113(b) § 63.113(h) [G]§ 63.115(f)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(3) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c)	§ 63.114(a)(3) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
V-F-F8-6B	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-F-F8-6B	EP	63G-F8-N	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 60.662(a) § 63.113(b) § 63.113(h) [G]§ 63.115(f)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(3) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c)	§ 63.114(a)(3) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a)	§ 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
								[G]§ 63.152(f)	[G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
V-F-F8-8	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See Periodic Monitoring Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
V-R-F8-1	EP	R5121-F8	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	** See Periodic Monitoring Summary		
V-R-F8-1	EP	63G-F8-R	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 60.702(a) § 63.113(b) § 63.113(h) [G]§ 63.115(f)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(3) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c)	§ 63.114(a)(3) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(iii) § 63.117(a)(4)(iv) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
V-R-F8-2	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
V-R-F8-2	EP	63GV-082R	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(1)(i) § 63.114(d)(1) § 63.114(e) [G]§ 63.115(f)	§ 63.114(a)(1) § 63.114(d)(1) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f)	§ 63.114(e) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Additional Monitoring Requirements

Compliance Assurance Monitoring Summary 96

Periodic Monitoring Summary 101

CAM Summary

Unit/Group/Process Information	
ID No.: GRPFGVE3	
Control Device ID No.: F4HF41	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1704 degree Fahrenheit while waste gas is vented to the incinerator.	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

CAM Summary

Unit/Group/Process Information	
ID No.: GRPFGVE4	
Control Device ID No.: F4HF41	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1704 degree Fahrenheit while waste gas is vented to the incinerator.	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

CAM Summary

Unit/Group/Process Information	
ID No.: GRPFGVE5	
Control Device ID No.: F6HF61	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1737 degree Fahrenheit while waste gas is vented to the incinerator.	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

CAM Summary

Unit/Group/Process Information	
ID No.: GRPFGVE6	
Control Device ID No.: F6HF61	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1737 degree Fahrenheit while waste gas is vented to the incinerator.	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

CAM Summary

Unit/Group/Process Information	
ID No.: V-R-F8-2	
Control Device ID No.: F6HF61	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the firebox temperature is less than 1737 degree Fahrenheit while waste gas is vented to the incinerator.	
CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: F8-RGN	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-F8-9
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: It is a deviation if visible emissions are observed.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is an opacity above the corresponding opacity limit, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F8-BOIL	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-13	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-13-1	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8-EMERG
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Valve's position open or closed.	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: It is a deviation if the valve positioner instrument detects the valve in the open position.	
Periodic Monitoring Text: Monitor the valve's position continuously through the data collection system in conjunction with an alarm that sets off when the valve is in the open position. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures. It shall be considered and reported as a deviation when an alarm indicates the valve is open.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-13-2	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8-EMERG
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Valve's position open or closed.	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: It is a deviation if the valve positioner instrument detects the valve in the open position.	
Periodic Monitoring Text: Monitor the valve's position continuously through the data collection system in conjunction with an alarm that sets off when the valve is in the open position. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures. It shall be considered and reported as a deviation when an alarm indicates the valve is open.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-23	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-3	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-32	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-6A	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-6B	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-F-F8-8	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: V-R-F8-1	
Control Device ID No.: F8-BOIL	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is less than 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-F8
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: n/a*	
Deviation Limit: It is a deviation if the combustion temperature is less than 410 degrees Fahrenheit.	
Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber into which the volatile organic compound is introduced. Any monitoring data below the minimum limit shall be considered and reported as a deviation.	

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
981966	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
981966	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 40 cubic meters (10,567 gallons).
981966	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Capacity is less than 38 cubic meters.
981967	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
981967	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 40 cubic meters (10,567 gallons).
981967	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Capacity is less than 38 cubic meters.
F4TF41	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
F4TF41	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
F6TF61	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			modified later than 7/23/84.
F6TF61	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
F6TF6101	N/A	40 CFR Part 60, Subpart Kb	Tank stores VOC (but not petroleum or petroleum liquids), but was constructed before 7/23/84 and has not been modified later than 7/23/84.
F6TF6101	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
F-F6-147	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
F-F6-148	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
F-F6-149	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
F-F6-150	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1or Group 2 storage

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			vessel, tank is required to comply only with the provisions of HON.
F-G1-106	N/A	40 CFR Part 60, Subpart NNN	Distillation unit constructed before 12/30/83 and has not been modified later than 12/30/83.
F-G1-106	N/A	40 CFR Part 63, Subpart G	Vent does not meet the definition of a process vent in Subpart F (63.107(d)). The gas stream contains less than 0.005 weight percent total Organic Hazardous Air Pollutants at the discharge to the atmosphere.
F-G3-18	N/A	40 CFR Part 60, Subpart NNN	Distillation unit was constructed before 12/30/83 and has not been modified later than 12/30/83.
F-G4-3	N/A	40 CFR Part 63, Subpart G	Vent does not meet the definition of a process vent in Subpart F (63.107(d)). The gas stream contains less than 0.005 weight percent total Organic Hazardous Air Pollutants at the discharge to the atmosphere.
F-G4-5	N/A	40 CFR Part 60, Subpart NNN	Distillation unit constructed before 12/30/83 and has not been modified later than 12/30/83.
F-G4-5	N/A	40 CFR Part 63, Subpart G	Vent does not meet the definition of a process vent in Subpart F (63.107(d)). The gas stream contains less than 0.005

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			weight percent total Organic Hazardous Air Pollutants at the discharge to the atmosphere.
F-P-136	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 40 cubic meters (10,567 gallons).
F-P-136	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Capacity is less than 38 cubic meters.
F-P-137	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 40 cubic meters (10,567 gallons).
F-P-137	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Capacity is less than 38 cubic meters.
F-P-138	N/A	40 CFR Part 60, Subpart Kb	As a HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
F-P-139	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON
G1TG196	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
G2TG215	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
G2TG216	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
G2TG217	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
G5TG55	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
G5TG56	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
GRPFGFU1	F4FUG, F6FUG, G1FUG,	40 CFR Part 60, Subpart VV	These facilities were constructed before

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
	G2FUG, G3FUG, G4FUG, G5FUG, G6FUG, RSEFUG		January 5, 1981 and have not undergone modification (as defined in 60.2 and 60.14) or reconstruction (as defined in 60.15 and 60.488) after January 5, 1981.
GRPFGTK1	RSET0133, RSET0137, RSET0157, RSET0158, RSET0159, RSET0168, RSET0181, RSET0182, RSET0202, RSET0203, RSET033, RSET034, RSET058	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
GRPFGTK2	942009, 961588, 9690, F4TF47, F6TF64, G2TG21, G3TG33, G3TG34, G3TG35, G3TG36, G5TG53, G5TG57, G5TG58	40 CFR Part 60, Subpart Kb	Tank capacity is less than 40 cubic meters (10,567 gallons).
GRPFGTK2	942009, 961588, 9690, F4TF47, F6TF64, G2TG21, G3TG33, G3TG34, G3TG35, G3TG36, G5TG53, G5TG57, G5TG58	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Capacity is less than 38 cubic meters.
GRPFGTK3	G1TG15, G1TG16, G2TG2111, G2TG2112, G2TG2138, G3TG31, G3TG312, G5TG519, G5TG520, RSET0176, RSET0177	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRPFGTK4	G1TG1100, G3TG311, G3TG32, G3TG38, G5TG512, G5TG513, G5TG514, G5TG515, G6TG61, RSET0121, RSET0132, RSET0162, RSET0186, RSET0201, RSET025, RSET035, RSET036, RSET037, RSET038, RSET05, RSET059, RSET06, RSET060, RSET076, RSET078, RSET085, RSET086, RSETO178, T-G3-9	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
GRPFGVE3	F-F4-135, F-F4-142, F-F4-33, F-F4-45, F-F4-54, F-F4-56, F-F4-57, F-F4-88	40 CFR Part 60, Subpart NNN	As HON Group 1 process vent, distillation unit is required to comply only with the provisions of HON.
GRPFGVE4	FC4300, F-F4-81, F-F4-82, F-F4-83, F-F4-84	40 CFR Part 60, Subpart RRR	As HON Group 1 process vent, reactor process is required to comply only with the provisions of HON.
GRPFGVE5	F-F6-104, F-F6-126, F-F6-33, F-F6-44, F-F6-45, F-F6-54, F-F6-56, F-F6-88, F-F6-95, F-G6-11	40 CFR Part 60, Subpart NNN	As HON Group 1 process vent, unit is required to comply only with the provisions of HON.
GRPFGVE6	FC6300, F-F6-105, F-F6-106, F-F6-84, F-F6-85, F-F6-86, F-F6-87	40 CFR Part 60, Subpart RRR	As HON Group 1 process vent, reactor process is required to comply only with the provisions of HON.
RSELDS	N/A	30 TAC Chapter 115, Loading and	Transfer operation is a marine loading

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The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
		Unloading of VOC	operation in a nonattainment area other than Houston/Galveston.
RSELDS	N/A	40 CFR Part 63, Subpart G	Transfer rack does not meet the definition of a transfer rack in Subpart F (63.101). This is a marine loading rack, and it is not used to fill tank trucks or railcars.
RSET01	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
RSET02	N/A	40 CFR Part 63, Subpart G	Tank does not meet the definition of a storage vessel in Subpart F (63.101). Does not store Organic Hazardous Air Pollutants, or Organic Hazardous Air Pollutants are present only as impurities.
RSET095	N/A	40 CFR Part 60, Subpart Kb	As HON Group 1 or Group 2 storage vessel, tank is required to comply only with the provisions of HON.
UEUL22	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not used chromium-based water treatment chemicals on or after September 8, 1994.
UEUL31	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not used chromium-based water treatment chemicals on or after September 8, 1994.
UEUL34	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not used chromium-based water treatment chemicals on or

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Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			after September 8, 1994.

New Source Review Authorization References

New Source Review Authorization References 124

New Source Review Authorization References by Emission Unit 125

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 106169	Issuance Date: 09/23/2013
Authorization No.: 36646	Issuance Date: 02/18/2010
Authorization No.: 5952A	Issuance Date: 02/18/2010
Authorization No.: 5972A	Issuance Date: 02/18/2010
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000
Number: 51	Version No./Date: 09/13/1993
Number: 51	Version No./Date: 10/04/1995

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
942009	COOLING TOWER - 1 YELLOW FG DIANODIC TANK	51/09/13/1993
961588	COOLING TOWER-2 YELLOW FG DIANODIC TANK	51/10/04/1995
9690	COOLING TOWER - 2 YELLOW FG FLOGARD TANK	51/10/04/1995
981966	COOLING TOWER - 1 YELLOW FG SPECTRUS TANK	106.472/03/14/1997
981967	COOLING TOWER - 2 YELLOW FG SPECTRUS TANK	106.472/03/14/1997
F4FF4135	F-4 REGENERATOR	5972A
F4FUG	F4 UNIT FUGITIVES	5972A
F4TF41	STORAGE TANK	5972A
F4TF47	STORAGE TANK	5972A
F6FF6104	REGENERATOR VENT	5952A
F6FUG	F6 UNIT FUGITIVES	5952A
F6TF6101	HEAT TRANSFER OIL TANK	5952A
F6TF61	HEAT TRANSFER OIL TANK	5952A
F6TF64	TRIETHANOLAMINE STORAGE TANK	5952A
F8-BOIL	F8 UNIT BOILER	106169
F8-FUG	F8 ETHYLENE OXIDE UNIT FUGITIVES	106169
F8-RGN	REGENERATOR VENT	106169
FC4300	F4 ARGON VENT	5972A
FC6300	F6 ARGON VENT	5952A

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
F-F4-135	REGENERATOR FLASH DRUM OVERHEADS	5972A
F-F4-142	EO STRIPPER	5972A
F-F4-33	#1 SCRUBBER	5972A
F-F4-45	REABSORBER	5972A
F-F4-54	REFINING COLUMN	5972A
F-F4-56	CO2 STRIPPER	5972A
F-F4-57	PURIFICATION COLUMN	5972A
F-F4-81	NO. 1 MAIN REACTOR	5972A
F-F4-82	NO. 2 MAIN REACTOR	5972A
F-F4-83	NO. 3 MAIN REACTOR	5972A
F-F4-84	NO. 4 REACTOR	5972A
F-F4-88	#2 SCRUBBER	5972A
F-F6-104	REGENERATOR FLASH DRUM OVERHEADS	5952A
F-F6-105	NO.5 REACTOR	5952A
F-F6-106	NO. 6 REACTOR	5952A
F-F6-126	GLYCOL FEED STRIPPER	5952A
F-F6-147	ETHYLENE OXIDE RUNDOWN TANK	5952A
F-F6-148	ETHYLENE OXIDE RUNDOWN TANK	5952A
F-F6-149	ETHYLENE OXIDE RUNDOWN TANK	5952A

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
F-F6-150	ETHYLENE OXIDE RUNDOWN TANK	5952A
F-F6-33	#1 SCRUBBER	5952A
F-F6-44	EO STRIPPER	5952A
F-F6-45	REABSORBER	5952A
F-F6-54	REFINING COLUMN	5952A
F-F6-56	CO2 STRIPPER	5952A
F-F6-84	NO. 1 MAIN REACTOR	5952A
F-F6-85	NO. 2 MAIN REACTOR	5952A
F-F6-86	NO. 3 MAIN REACTOR	5952A
F-F6-87	NO. 4 REACTOR	5952A
F-F6-88	#2 SCRUBBER	5952A
F-F6-95	PURIFICATION COLUMN	5952A
F-F8-9	CARBONATE REGENERATOR	106169
F-G1-106	GLYCOL FLASH TOWER	36646
F-G3-18	WIPED FILM EVAPORATOR	36646
F-G4-3	SECOND DEWATERING TOWER	36646
F-G4-5	AFG TOWER	36646
F-G6-11	G6 SCRUBBER (ALDEHYDE PURGE)	36646
F-P-136	STORAGE TANK	5972A

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
F-P-137	STORAGE TANK	5972A
F-P-138	STORAGE TANK	5972A
F-P-139	STORAGE TANK	5972A
G1FUG	G1 UNIT FUGITIVES	36646
G1TG1100	TANK T-G1-100	36646
G1TG15	TANK T-G1-5	36646
G1TG16	TANK T-G1-6	36646
G1TG196	TANK T-G1-96	36646
G2FUG	G2 UNIT FUGITIVES	36646
G2TG2111	TANK T-G2-111	36646
G2TG2112	TANK T-G2-112	36646
G2TG2138	TANK T-G2-138	36646
G2TG215	TANK T-G2-15	36646
G2TG216	TANK T-G2-16	36646
G2TG217	TANK T-G2-17	36646
G2TG21	TANK T-G2-1	36646
G3FUG	G3 UNIT FUGITIVES	36646
G3TG311	TANK T-G3-11	36646
G3TG312	TANK T-G3-12	36646

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
G3TG31	TANK T-G3-1	36646
G3TG32	TANK T-G3-2	36646
G3TG33	TANK T-G3-3	36646
G3TG34	TANK T-G3-4	36646
G3TG35	TANK T-G3-5	36646
G3TG36	TANK T-G3-6	36646
G3TG38	TANK T-G3-8	36646
G4FUG	G4 UNIT FUGITIVES	36646
G5FUG	G5 UNIT FUGITIVES	36646
G5TG512	TANK T -G5-12	36646
G5TG513	TANK T-G5-13	36646
G5TG514	TANK T-G5-14	36646
G5TG515	TANK T-G5-15	36646
G5TG519	TANK T-G5-19	36646
G5TG520	TANK T-G5-20	36646
G5TG53	TANK T-G5-3	36646
G5TG55	TANK T-G5-5	36646
G5TG56	TANK T-G-6	36646
G5TG57	TANK-G5-7	36646

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
G5TG58	TANK T-G5-8	36646
G6FUG	G6 UNIT FUGITIVES	36646
G6TG61	TANK T-G6-1	36646
PROF4HON	F4 HON PROCESS UNIT	5972A
PROF6HON	F6 HON PROCESS UNIT	5952A
PROF8HON	F8 ETHYLENE OXIDE UNIT	106169
PROG1HON	G1 HON PROCESS UNIT	36646
PROG2HON	G2 HON PROCESS UNIT	36646
PROG3HON	G3 HON PROCESS UNIT	36646
PROG4HON	G4 HON PROCESS UNIT	36646
PROG5HON	G5 HON PROCESS UNIT	36646
PROG6HON	G6 HON PROCESS UNIT	36646
PRORSHON	R&S HON PROCESS UNIT	36646
RSEFUG	R&S FUGITIVES	36646
RSELDS	DOCK BARGE LOADING	36646
RSELRBMTC	BOOMTRACK TANKCAR LOADING	36646
RSELRBMTD	BOOMTRACK DRUM LOADING	36646
RSELRBMTW	BOOMTRACK TANKWAGON LOADING	36646
RSELRPRDC	PRODUCT RACK TANK CAR LOADING	36646

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
RSELRTRKW	TRUCK RACK TANKWAGON LOADING	36646
RSET0121	TANK T-0-121	36646
RSET0132	TANK T-0-132	36646
RSET0133	TANK T-0-133	36646
RSET0137	TANK T-0-137	36646
RSET0157	TANK T-0-157	36646
RSET0158	TANK T-0-158	36646
RSET0159	TANK T-0-159	36646
RSET0162	TANK T-O-162	36646
RSET0168	TANK T-0-168	36646
RSET0176	TANK T-0-176	36646
RSET0177	TANK T-0-177	36646
RSET0181	TANK T-O-181	36646
RSET0182	TANK T-0-182	36646
RSET0186	TANK T-0-186	36646
RSET01	TANK T-0-1	36646
RSET0201	TANK T-0-201	36646
RSET0202	TANK T -0-202	36646
RSET0203	TANK T-0-203	36646

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
RSET025	TANK T-0-25	36646
RSET02	TANK T-0-2	36646
RSET033	TANK T-0-33	36646
RSET034	TANK T-0-34	36646
RSET035	TANK T-0-35	36646
RSET036	TANK T-O-36	36646
RSET037	TANK T-0-37	36646
RSET038	TANK T-0-38	36646
RSET058	TANK T-O-58	36646
RSET059	TANK T-0-59	36646
RSET05	TANK-T-0-5	36646
RSET060	TANK T-0-60	36646
RSET06	TANK T-0-6	36646
RSET076	TANK T-0-76	36646
RSET078	TANK T-0-78	36646
RSET085	TANK T-0-85	36646
RSET086	TANK T-0-86	36646
RSET095	TANK T-O-95	36646
RSETO178	TANK T-P-178	36646

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
T-F8-101	PROCESS WATER TANK	106169
T-F8-104	NEUTRALIZER TANK	106169
T-G3-9	OFF-TEST GLYCOL TANK	36646
UEUL22	COOLING TOWER NO. 2/NO.3	36646, 5972A
UEUL31	COOLING TOWER NO.6	36646, 5952A
UEUL34	COOLING TOWER NO. 1	36646
V-F8-BOIL	F8-UNIT BOILER VENT	106169
V-F-F8-13-1	REABSORBER ALTERNATE VENT TO ATMOSPHERE	106169
V-F-F8-13-2	REABSORBER ATMOSPHERIC VENT	106169
V-F-F8-13	EO STRIPPER, GLYCOL FD STRIPPER, & REABSORBER VNT	106169
V-F-F8-23	GAS-GAS EXCHANGE BLOWDOWN POT VENT	106169
V-F-F8-32	WASTE GAS SEAL DRUM VENT	106169
V-F-F8-3	SCRUBBER VENT	106169
V-F-F8-6A	REGENERATOR FEED FLASH DRUM VENT	106169
V-F-F8-6B	REGENERATOR FEED L.P. FLASH DRUM VENT	106169
V-F-F8-8	CONTRACTOR CONDENSATE FLASH DRUM VENT	106169
V-R-F8-1	EO BOILING WATER REACTOR VENT	106169
V-R-F8-2	GLYCOL REACTOR VENT	5952A

Appendix A

Acronym List 135

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Message

From: Donna Williams [donna.williams@tceq.texas.gov]
Sent: 11/7/2016 3:36:31 PM
To: Wilson, Aimee [Wilson.Aimee@epa.gov]
CC: Mike Wilson [mike.wilson@tceq.texas.gov]; Jesse Chacon [jesse.chacon@tceq.texas.gov]; Julie Guthrie [julie.guthrie@tceq.texas.gov]; Kelley Oswalt [Kelley.Oswalt@Tceq.Texas.Gov]; Tan Nguyen [Tan.Nguyen@tceq.texas.gov]; Alfredo Mendoza [alfredo.mendoza@tceq.texas.gov]
Subject: Texas Notification Report
Attachments: EPA_20161107.rtf; O1018_ATLANTIC COFFEE INDUSTRIAL SOLUTIONS LLC_SOB.docx; O1018_ATLANTIC COFFEE INDUSTRIAL SOLUTIONS LLC_SOP.docx; O1329_LINDE GAS NORTH AMERICA LLC_SOP.docx; O1707_EXXONMOBIL OIL CORPORATION_SOB.docx; O1707_EXXONMOBIL OIL CORPORATION_SOP.docx; O1754_TENASKA FRONTIER PARTNERS LTD_SOB.docx; O1754_TENASKA FRONTIER PARTNERS LTD_SOP.pdf; O2633_MOLDED FIBER GLASS COMPANIES-TEXAS LP_SOB.docx; O2633_MOLDED FIBER GLASS COMPANIES-TEXAS LP_SOP.docx; O2710_CHEVRON PHILLIPS CHEMICAL COMPANY LP_SOB.docx; O2710_CHEVRON PHILLIPS CHEMICAL COMPANY LP_SOP.docx; O2733_COLONIAL PIPELINE COMPANY_SOP.docx; O2733_COLONIAL PIPELINE COMPANY_SOB.docx; O2743_MAGELLAN PIPELINE TERMINALS LP_SOB.docx; O2743_MAGELLAN PIPELINE TERMINALS LP_SOP.docx; O3269_TICONA POLYMERS INC_SOB.docx; O3269_TICONA POLYMERS INC_SOP.docx; O615_TARGA DOWNSTREAM LLC_SOB.docx; O615_TARGA DOWNSTREAM LLC_SOP.docx; O1329_LINDE GAS NORTH AMERICA LLC_SOB.docx

Minor Revision Projects:

O1707 - EXXONMOBIL OIL CORPORATION
O2710 - CHEVRON PHILLIPS CHEMICAL COMPANY LP
O2733 - COLONIAL PIPELINE COMPANY
O3269 - TICONA POLYMERS INC
O615 - TARGA DOWNSTREAM LLC

Renewal Projects:

O1018 - ATLANTIC COFFEE INDUSTRIAL SOLUTIONS LLC
O1329 - LINDE GAS NORTH AMERICA LLC
O1754 - TENASKA FRONTIER PARTNERS LTD
O2633 - MOLDED FIBER GLASS COMPANIES-TEXAS LP
O2743 - MAGELLAN PIPELINE TERMINALS LP

[SEQ CHAPTER \H \R 1]FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Linde Gas North America LLC

AUTHORIZING THE OPERATION OF
Carbon Monoxide Unit
Industrial Gases

LOCATED AT
Harris County, Texas
Latitude 29° 37' 17" Longitude 95° 3' 50"
Regulated Entity Number: RN103080487

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: O1329 Issuance Date: _____

_____

[ADVANCE \x 144]For the Commission

Table of Contents

Section **Page**

[TOC \o "1-3" \h \z \t "SOP_Heading1,1,SOP_Heading2,2,SOP_Heading2 + Centered,2,SOP_Heading1 + Centered,1"]

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

[SEQ CHAPTER \h \r 1]Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

E. Emission units subject to 40 CFR Part 63, Subparts EEE, EEEE, and ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §§ 113.620, 113.880, and 113.1090, respectively, which incorporates the 40 CFR Part 63 Subpart by reference.

F. A VOC vent stream from MSSPROPVENT (included in the applicable requirements summary) is routed to a control device (ID: 57MN1147ST flare unit) located at an adjacent site for VOC destruction. The adjacent site, which is owned and operated by Arkema Inc., is operating under a Federal Operating Permit O1988.

G. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.302 (relating to General Provisions)

(ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)

(iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit

H. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:

(i) Title 30 TAC § 101.352 (relating to General Provisions)

(ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.358 (relating to Emission Monitoring and Compliance Demonstration)

(vi) Title 30 TAC § 101.359 (relating to Reporting)

(vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)

(viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are

subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the

appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

E. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

(i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)

(ii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).

5. The permit holder shall comply with the requirements of 30 TAC § 115.722(b) (relating to Site-wide Cap and Control Requirements) and the requirements of 30 TAC § 115.726(g) (relating to Recordkeeping and Reporting Requirements).

6. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter H, Division 1 for pressure relief devices not controlled by a flare:

   A. Title 30 TAC § 115.725(c)

   B. Title 30 TAC § 115.725(c)(1), (c)(1)(A) - (C)

   C. Title 30 TAC § 115.725(c)(2)

   D. Title 30 TAC § 115.725(c)(3), (c)(3)(A) - (E)

   E. Title 30 TAC § 115.725(c)(4)

   F. Title 30 TAC § 115.725(l)

   G. Title 30 TAC § 115.726(c), (c)(1) - (4)

7. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams having no potential to emit HRVOC.

8. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams from sources exempt under 30 TAC § 115.727(c)(3).

9. The permit holder shall comply with the requirements of 30 TAC § 115.761(b) (relating to Site-wide Cap) and the requirements of 30 TAC § 115.766(g) (relating to Recordkeeping and Reporting Requirements).

10. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

11. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

12. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:

    A. Are incorporated by reference into this permit as applicable requirements

    B. Shall be located with this operating permit

    C. Are not eligible for a permit shield

13. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

14. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

15. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

16. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

        (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

(1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).

C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

17. Use of Emission Credits to comply with applicable requirements:

A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) Offsets for Title 30 TAC Chapter 116

B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)

(ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1

(iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)

18. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Permit Location

19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 12

Applicable Requirements Summary 15

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
51ANAL	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5727	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
51ANAL	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5127	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
51COHEAD	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5127-1	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg)., Alternate Control Requirement = Alternate control is not used., Control Device Type = Smokeless flare
51COHEAD	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5127-2	30 TAC Chapter 115, Vent Gas Controls	Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg)., VOC Concentration = VOC concentration is less than 612 ppmv.
51MH5A	PROCESS HEATERS/ FURNACES	N/A	R2009-01	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
51MH5A	PROCESS HEATERS/ FURNACES	N/A	R7310-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
51MH5A	BOILERS/ STEAM GENERATORS/ STEAM GENERATING UNITS	N/A	63EEE	40 CFR Part 63, Subpart EEE	No changing attributes.
51SK01	SOLVENT DEGREASING MACHINES	N/A	R5412-01	30 TAC Chapter 115, Degreasing Processes	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
51SUMP59	STORAGE TANKS/ VESSELS	N/A	R5111	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
51V1206	STORAGE TANKS/ VESSELS	N/A	R5111	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
51V655	STORAGE TANKS/ VESSELS	N/A	R5112-001	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Other vapor destruction unit
51V655	STORAGE TANKS/ VESSELS	N/A	R5112-002	30 TAC Chapter 115, Storage of VOCs	Control Device Type = Flare
51V671	STORAGE TANKS/ VESSELS	N/A	R5111	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
51V704	STORAGE TANKS/ VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
51V704	STORAGE TANKS/ VESSELS	N/A	63EEEE	40 CFR Part 63, Subpart EEEE	No changing attributes.
51V778	STORAGE TANKS/ VESSELS	N/A	R5111	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GER-0011	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GER-0011	SRIC ENGINES	N/A	R7303	30 TAC Chapter 117, Subchapter B	No changing attributes.
GER-0011	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
MSSMEOHTRK	LOADING/UNLOADING OPERATIONS	N/A	R5217	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
MSSPROPVENT	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5720	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
MSSPROPVENT	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R5121	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
MSSV655TRK	LOADING/UNLOADING OPERATIONS	N/A	R5217	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
51ANAL	EP	R5727	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.727(c)(2)	A vent gas stream that has the potential to emit HRVOCs, but has a concentration less than 100 ppmv at all times or has a maximum potential flow rate equal to or less than 100 dry standard cubic feet per hour is exempt from this division with the exception of § 115.726(e)(3)(A) of this title. The maximum potential HRVOC emissions for the sum of all vent gas streams claimed under this exemption, must be less for the account specified in § 115.722(a) or (b) of this title than 0.5 tpy.	None	§ 115.726(e)(3)(A) § 115.726(j)(2)	None
51ANAL	EP	R5127	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
51ANAL	EP	R5127	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).			
51COHEAD	EP	R5127-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
51COHEAD	EP	R5127-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
51MH5A	EU	R2009-01	SO_2	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(c)	No person shall use liquid fuel with a sulfur content greater than 0.3% by weight, or allow emissions of SO2 to exceed 150 ppmv, based on 20% excess air, averaged over a 3-hour period.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
51MH5A	EU	R7310-01	NO_x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(3)(B)(i) §	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					117.310(a)(3)(B)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)		§ 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8)
51MH5A	EU	63EEE	DIOXINS/FURANS	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(1)(ii) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain CO emissions in excess of the limits provided by §63.1217(a)(5) for sources not equipped with a dry air pollution control system;	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) [G]§ 63.1207(b)(2) [G]§ 63.1207(b)(3) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) §	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) § 63.1209(k)(2)(i) [G]§ 63.1209(k)(3) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xix)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1207(l)(2) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(k) § 63.1209(k)(1)(i) § 63.1209(k)(2)(i) § 63.1209(k)(2)(ii) [G]§ 63.1209(k)(3) [G]§ 63.1209(k)(4) § 63.1209(k)(5) [G]§ 63.1209(k)(6) [G]§ 63.1209(k)(7) [G]§ 63.1209(k)(8) [G]§ 63.1209(k)(9) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)		63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(i)(A) § 63.1207(g)(1)(ii) § 63.1207(g)(2)(ii) § 63.1207(g)(2)(v) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) [G]§ 63.1208(b)(1) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(k)(2)(i)	[G]§ 63.1211(d)	§ 63.1207(f)(1)(xv) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xviii) [G]§ 63.1207(f)(1)(xx) [G]§ 63.1207(f)(1)(xxi) § 63.1207(f)(1)(xxii) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(2) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 63.1209(k)(3) [G]§ 63.1209(k)(8) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		[G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
51MH5A	EU	63EEE	Mercury	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(2)(i) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1207(m)(3) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(l) § 63.1209(l)(1)(ii) § 63.1209(l)(1)(ii)(A) [G]§	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain Hg, except as provided for in paragraph §63.1217 (a)(2)(iii), when you burn hazardous waste with an as-fired heating value less than 10,000 Btu/lb, emissions in excess of 19 µg/dscm , corrected to 7 % 02, on an (not-to-exceed) annual averaging period.	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvi) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvi) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					63.1209(l)(1)(ii)(C) [G]§ 63.1209(l)(1)(ii)(D) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)		§ 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1208(b)(2) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(5) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(l) § 63.1209(l)(1)(ii) § 63.1209(l)(1)(ii)(A) [G]§ 63.1209(l)(1)(ii)(C) [G]§ 63.1209(l)(1)(ii)(D) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1207(m)(5) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) § 63.1209(g)(1)(iv)(B) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
51MH5A	EU	63EEE	COMBINED METALS	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(3)(i) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1207(m)(3) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(n) § 63.1209(n)(1) § 63.1209(n)(2)(i) § 63.1209(n)(2)(v)(A) § 63.1209(n)(2)(v)(A)(1) [G]§ 63.1209(n)(2)(v)(A)(3) [G]§ 63.1209(n)(5) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1)	atmosphere combustion gases that contain cadmium and lead combined, except for an area source as defined under §63.2, when you burn hazardous waste with an as-fired heating value less than 10,000 Btu/lb, emissions in excess of 150 µg/dscm, corrected to 7 % O2, on an (not-to-exceed) annual averaging period.	§ 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1208(b)(3) § 63.1208(b)(7)	[G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	[G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvi) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvi) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1207(m)(5) § 63.1209(c)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)		§ 63.1208(b)(8) § 63.1209(a)(5) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) § 63.1209(c)(5) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(n)(2)(v)(A) § 63.1209(n)(2)(v)(A)(1) [G]§ 63.1209(n)(2)(v)(A)(3) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) § 63.1209(g)(1)(iv)(A) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
51MH5A	EU	63EEE	PM	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(7) [G]§ 63.1206(b)(5) § 63.1206(b)(8)(v) § 63.1206(b)(8)(vi) § 63.1206(b)(8)(vii) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain particulate matter, except for an area source as defined under §63.2 or as provided by §63.1217(e), emissions in excess of 80	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(b)(8)(iii) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(b)(8)(iii) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(m) [G]§ 63.1209(m)(1)(i) [G]§ 63.1209(m)(1)(iv) [G]§ 63.1209(m)(2) § 63.1209(m)(3) § 63.1209(n)(3) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)	mg/dscm corrected to 7 % 02.	[G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(i)(C) § 63.1207(g)(1)(ii) § 63.1207(g)(2)(iv) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) § 63.1208(b)(6) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(1)(iii) § 63.1209(a)(5) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3)	§ 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	[G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxiii) [G]§ 63.1207(f)(1)(xxiv) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(iv) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(m) [G]§ 63.1209(m)(1)(i) [G]§ 63.1209(m)(1)(iv) [G]§ 63.1209(m)(2) § 63.1209(m)(3) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		[G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
51MH5A	EU	63EEE	POHC	40 CFR Part 63, Subpart EEE	§ 63.1217(c)(1) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k)	For liquid fuel boilers, except as provided in §63.1217(c)(2), you must achieve a DRE of 99.99% for each POHC designated under paragraph §63.1217(c)(3). You must calculate DRE for each POHC using the equation in §63.1217(c)(2).	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(b)(7)(i) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) § 63.1207(f)(1)(ii)(D) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.1207(l)(1) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) [G]§ 63.1209(j) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(c)(3)(i) § 63.1217(c)(3)(ii)		§ 63.1207(f)(1)(ii)(D) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) [G]§ 63.1209(j) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)	[G]§ 63.1211(d)	§ 63.1207(f)(1)(xii) § 63.1207(f)(1)(xix) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
51MH5A	EU	63EEE	Chromium	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(4)(i) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§ 63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1207(m)(3) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(n) § 63.1209(n)(1) § 63.1209(n)(2)(i) § 63.1209(n)(2)(v)(B)(2) § 63.1209(n)(2)(vi) [G]§ 63.1209(n)(5) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1)	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain chromium, except for an area source as defined under §63.2, when you burn hazardous waste with an as-fired heating value less than 10,000 Btu/lb, emissions in excess of 370 µg/dscm, corrected to 7 % 02.	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1)	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xi) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xvi) § 63.1207(f)(1)(xvii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvi) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)		[G]§ 63.1207(m)(1) [G]§ 63.1207(m)(2) § 63.1208(b)(4) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(5) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3) § 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) § 63.1209(c)(5) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(n)(2)(v)(B)(2) § 63.1209(n)(2)(vi) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		[G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1207(m)(5) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) § 63.1209(g)(1)(iv)(A) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d) § 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
51MH5A	EU	63EEE	Total Hydrocarbons/CO	40 CFR Part 63, Subpart EEE	§ 63.1217(a)(5)(i) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(i) § 63.1206(c)(6)(ii) [G]§ 63.1206(c)(6)(iv) [G]§	For existing liquid fuel boilers, you must not discharge or cause to be emitted into the atmosphere combustion gases that contain CO in excess of 100 ppmv, over an hourly rolling average (monitored continuously with a CEMs), dry basis and corrected to 7 % 02. If	[G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(b)(6) [G]§ 63.1206(c)(3) § 63.1207(a) § 63.1207(b)(1) § 63.1207(c)(1) [G]§ 63.1207(c)(2) [G]§ 63.1207(d) [G]§ 63.1207(e) [G]§	§ 63.1206(b)(11) [G]§ 63.1206(b)(12) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(1) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1206(c)(5) § 63.1206(c)(6)(vii) [G]§ 63.1206(c)(7) § 63.1207(f)(1)(xii) § 63.1207(g)(1)(iii)(A)	§ 63.1206(b)(11) [G]§ 63.1206(b)(5) [G]§ 63.1206(c)(2) [G]§ 63.1206(c)(3) [G]§ 63.1206(c)(4) [G]§ 63.1207(e) [G]§ 63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					63.1206(c)(6)(v) [G]§ 63.1206(c)(6)(vi) [G]§ 63.1206(c)(7) § 63.1207(g)(1)(iii)(A) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1209(c)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(d) § 63.1209(i) § 63.1209(p) [G]§ 63.1209(q) § 63.1211(c)(1) § 63.1211(c)(2) § 63.1211(c)(4) § 63.1217(d)	complying with this CO standard rather than the hydrocarbon standard under §63.1217(a)(5)(ii), hydrocarbons do not exceed 10 ppmv , and must be reported as specified.	63.1207(f)(1)(i) § 63.1207(f)(1)(ii) § 63.1207(f)(1)(ii)(A) § 63.1207(f)(1)(ii)(B) § 63.1207(f)(1)(ii)(C) [G]§ 63.1207(f)(1)(iii) § 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xxvii) § 63.1207(g) § 63.1207(g)(1)(ii) § 63.1207(g)(2)(i) § 63.1207(g)(2)(v) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(l)(1) § 63.1208(b)(7) § 63.1208(b)(8) § 63.1209(a)(1)(i) § 63.1209(a)(2) [G]§ 63.1209(a)(3) [G]§ 63.1209(a)(6) § 63.1209(a)(7) § 63.1209(b)(1) [G]§ 63.1209(b)(2) § 63.1209(b)(3)	§ 63.1209(b)(1) [G]§ 63.1209(c)(2) [G]§ 63.1209(c)(4) [G]§ 63.1209(q) § 63.1211(b) [G]§ 63.1211(c)(3) [G]§ 63.1211(d)	§ 63.1207(f)(1)(iv) § 63.1207(f)(1)(ix) § 63.1207(f)(1)(v) § 63.1207(f)(1)(vi) § 63.1207(f)(1)(vii) § 63.1207(f)(1)(viii) § 63.1207(f)(1)(xii) § 63.1207(f)(1)(xviii) § 63.1207(f)(1)(xxvii) § 63.1207(f)(2)(i) § 63.1207(f)(2)(ix) § 63.1207(f)(2)(v) § 63.1207(f)(2)(vi) § 63.1207(f)(2)(vii) § 63.1207(f)(2)(viii) § 63.1207(f)(2)(x) [G]§ 63.1207(h) [G]§ 63.1207(i) [G]§ 63.1207(j)(1) § 63.1207(j)(3) § 63.1207(j)(4) § 63.1207(j)(5) [G]§ 63.1207(k) [G]§ 63.1207(l)(1) § 63.1207(l)(3) § 63.1209(c)(3) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) [G]§ 63.1209(g)(1)(iii) [G]§ 63.1210(a) [G]§ 63.1210(b)(1) § 63.1210(b)(2) § 63.1210(b)(3)(i) § 63.1210(c)(1)(i) § 63.1210(c)(2) [G]§ 63.1210(c)(3) [G]§ 63.1210(c)(4) [G]§ 63.1210(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.1209(b)(4) [G]§ 63.1209(b)(5) [G]§ 63.1209(c)(4) [G]§ 63.1209(d) [G]§ 63.1209(f) § 63.1209(g)(1)(i) § 63.1209(g)(1)(ii) § 63.1209(i) § 63.1209(p) [G]§ 63.1209(q) § 63.1209(r)		§ 63.1211(a) [G]§ 63.1211(c)(3) [G]§ 63.1211(d) § 63.1212(a)
51SK01	EU	R5412-01	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) [G]§ 115.412(1)(A) § 115.412(1)(C) § 115.412(1)(D) § 115.412(1)(E) [G]§ 115.412(1)(F) § 115.417(1)	Cold solvent cleaning. No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F).	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
51SUMP59	EU	R5111	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
51V1206	EU	R5111	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
51V655	EU	R5112-001	VOC	30 TAC Chapter 115, Storage of	§ 115.112(e)(1) § 115.112(e)(3)	No person shall place, store, or hold VOC in	§ 115.115(a) § 115.115(a)(6)	§ 115.118(a)(4) § 115.118(a)(4)(F)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs	§ 115.112(e)(3)(A) § 115.112(e)(3)(A)(i)	any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(5) § 115.118(a)(7)	
51V655	EU	R5112-002	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(C) § 60.18	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(2) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
51V671	EU	R5111	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
51V704	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1) § 115.112(e)(3) § 115.112(e)(3)(C) § 60.18	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(2) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None
51V704	EU	63EEEE	112(B) HAPS	40 CFR Part 63, Subpart EEEE	§ 63.2338(b) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63,	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart EEEE	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart EEEE	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart EEEE

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					Subpart EEEE				
51V778	EU	R5111	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GER-0011	EP	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GER-0011	EU	R7303	EXEMPT	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the	None	§ 117.340(j) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)			
GER-0011	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602-Table2c.1 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(b) § 63.6640(f)(1) [G]§ 63.6640(f)(2) § 63.6640(f)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii § 63.6640(b)	§ 63.6625(i) § 63.6655(a) § 63.6655(a)(1) § 63.6655(d) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
MSSMEOHTRK	EU	R5217	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(2)(A) § 115.212(a)(2) [G]§ 115.212(a)(7) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Any plant, excluding gasoline bulk plants, which loads less than 20,000 gpd of VOC with a true vapor pressure of 0.5 psia or greater is exempt from the requirements of this division, except for the specified requirements.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	None
MSSPROPVENT	EP	R5720	HIGHLY REACTIVE VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.722(d) § 115.722(d)(1) § 115.722(d)(2)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 2 of this subchapter must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) [G]§ 115.726(g) [G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						relief valve, cooling tower, or any combination.			
MSSPROPVENT	EP	R5121	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	Vent gas affected by §115.121(a)(1) must be controlled properly with a control efficiency > 90% or to a VOC concentration of no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
MSSV655TRK	EU	R5217	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(2)(A) § 115.212(a)(2) [G]§ 115.212(a)(7) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Any plant, excluding gasoline bulk plants, which loads less than 20,000 gpd of VOC with a true vapor pressure of 0.5 psia or greater is exempt from the requirements of this division, except for the specified requirements.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	None

Additional Monitoring Requirements

Periodic Monitoring Summary 36

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 51MH5A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R2009-01
Pollutant: SO_2	Main Standard: § 112.9(c)
Monitoring Information	
Indicator: Sulfur Content	
Minimum Frequency: Quarterly	
Averaging Period: N/A	
Deviation Limit: The maximum sulfur concentrations are: --the natural gas to main burner and atomizer is 165 ppmw or 19.43 ppmv; --the liquid waste methanol stream is 115 ppmw; --the vent gas composition (slip analyzers V-655, V-620) is 20 ppmv.	
Periodic Monitoring Text: The maximum sulfur concentration will be 26.96 ppmv, if all three fuels contain the maximum possible sulfur content before dilution with combustion air. Natural gas sulfur content will be determined quarterly through either Vendor Certificate of Analysis, 3rd party lab analysis, or Draeger Tube sampling. Waste methanol sulfur content will be analyzed quarterly through a 3rd party lab analysis, or by inhouse lab analysis. Vent gas sulfur content will be determined quarterly through either 3rd party lab analysis, or Draeger Tube sampling.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 51SK01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	
Periodic Monitoring Text: Inspect equipment and record data monthly to ensure compliance with any applicable requirements in § 115.412(1)(A)-(F). Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GER-0011	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: 20% Opacity	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.	

Permit Shield

Permit Shield 40

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
51COFUG	N/A	30 TAC Chapter 115, HRVOC Fugitive Emissions	Not a process unit or process within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl tert-butyl ether manufacturing process; or natural gas/gasoline processing operation.
51COFUG	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Not a process unit or process within a petroleum refinery; synthetic organic chemical, polymer, resin, or methyl tert-butyl ether manufacturing process; or natural gas/gasoline processing operation.
51MJ151	N/A	30 TAC Chapter 117, Subchapter B	Emissions from the eductor result from the combustion of natural gas and is used only to preheat the shell of the reactor vessel. The eductor does not fall into any of the categories of combustion units in 117.300.
51MJ152	N/A	30 TAC Chapter 117, Subchapter B	Emissions from the eductor result from the combustion of natural gas and is used only to preheat the shell of the reactor vessel. The eductor does not fall into any of the categories of combustion units in 117.300.
51MJ153	N/A	30 TAC Chapter 117, Subchapter B	Emissions from the eductor result from the combustion of natural gas and is used only to preheat the shell of the reactor vessel. The eductor does not fall into any of the categories of combustion units in 117.300.
51SUMP59	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51SUMP59	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51SUMP59	N/A	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			cubic meters.
51V1206	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51V1206	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51V1206	N/A	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
51V655	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51V655	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51V655	N/A	40 CFR Part 60, Subpart Kb	Vessel was not constructed, reconstructed, or modified after 07/23/1984.
51V655	N/A	40 CFR Part 63, Subpart EEEE	Organic liquids for the purpose of this subpart do not include hazardous waste.
51V671	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51V671	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51V671	N/A	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
51V683	N/A	30 TAC Chapter 115, Storage of	Vessel has a storage capacity less than or equal to 1,000

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
		VOCs	gallons.
51V683	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51V683	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51V683	N/A	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
51V704	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51V704	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51V704	N/A	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
51V778	N/A	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
51V778	N/A	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
51V778	N/A	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
GRP-LUBE	51V1222, 51V1223, 51VLUB1070, 51VLUB1071, 51VLUB1306, 51VLUB1590, 51VLUB30	30 TAC Chapter 115, Storage of VOCs	Vessel has a storage capacity less than or equal to 1,000 gallons.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-LUBE	51V1222, 51V1223, 51VLUB1070, 51VLUB1071, 51VLUB1306, 51VLUB1590, 51VLUB30	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
GRP-LUBE	51V1222, 51V1223, 51VLUB1070, 51VLUB1071, 51VLUB1306, 51VLUB1590, 51VLUB30	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
GRP-LUBE	51V1222, 51V1223, 51VLUB1070, 51VLUB1071, 51VLUB1306, 51VLUB1590, 51VLUB30	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
GRP-SUMPS	51SUMP17, 51SUMP37	40 CFR Part 60, Subpart K	The storage capacity has a design capacity less than 40,000 gallons.
GRP-SUMPS	51SUMP17, 51SUMP37	40 CFR Part 60, Subpart Ka	The storage capacity has a design capacity less than 40,000 gallons.
GRP-SUMPS	51SUMP17, 51SUMP37	40 CFR Part 60, Subpart Kb	The storage capacity has a design capacity less than 75 cubic meters.
MSSBLRTOTE	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	The capacity is less than 1000 gallons and does not meet the definition of a transport vessel.
MSSCBOXDRM	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	The capacity is less than 1000 gallons and does not meet the definition of a transport vessel.
MSSV655DRM	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	The capacity is less than 1000 gallons and does not meet the definition of a transport vessel.
MSSV655TRK	N/A	40 CFR Part 63, Subpart EEEE	This transfer rack is used to conduct maintenance activities, transfers materials from storage tank to transport vehicle (tank truck) during maintenance

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			activities.
PROCOUNIT	N/A	40 CFR Part 60, Subpart NNN	This facility does not produce any of the chemicals listed in §60.667 as a product, co-product, by-product, or intermediate.
PROCOUNIT	N/A	40 CFR Part 60, Subpart RRR	This facility does not produce any of the chemicals listed in §60.707 as a product, co-product, by-product, or intermediate.
PROCOUNIT	N/A	40 CFR Part 61, Subpart J	Benzene service at this facility is less than 10 percent by weight.
PROCOUNIT	N/A	40 CFR Part 61, Subpart V	Volatile hazardous air pollutant (VHAP) service at this facility is less than 10 percent by weight.
PROCOUNIT	N/A	40 CFR Part 63, Subpart F	This facility does not manufacture a chemical listed in Table 1 of this Subpart or listed in 63.100(b)(1)(ii).
PROCOUNIT	N/A	40 CFR Part 63, Subpart FFFF	Carbon Monoxide production facility.

New Source Review Authorization References

New Source Review Authorization References 46

New Source Review Authorization References by Emission Unit 47

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 4056	Issuance Date: 12/29/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
51ANAL	ANALYZER VENT	4056
51COFUG	FUGITIVES	4056
51COHEAD	CO REG V VENT HEADER	4056
51MH5A	HEATERMH-5A	4056
51MJ151	EDUCTOR NO. 39	4056
51MJ152	EDUCTOR NO. 138	4056
51MJ153	EDUCTOR NO. 139	4056
51SK01	SAFETY KLEEN DEGREASER NO. 1	106.454/11/01/2001
51SUMP17	CO PROCESS SUMP	106.261/11/01/2003
51SUMP37	H2 COMPRESSION AREA PROCESS SUMP	106.261/11/01/2003
51SUMP59	PROCESS SUMP NO. 59	4056
51V1206	CO V1206 TANK	106.472/09/04/2000
51V1222	P2020 LUBE OIL TANK	106.472/09/04/2000
51V1223	P2021 LUBE OIL TANK	106.472/09/04/2000
51V655	CO V655 TANK	4056
51V671	CO V671 TANK	106.472/09/04/2000
51V683	CO V683 TANK	106.472/09/04/2000
51V704	CO V704 TANK	4056
51V778	CO V778 TANK	106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
51VLUB1070	P1070 LUBE OIL TANK	106.472/09/04/2000
51VLUB1071	P1071 LUBE OIL TANK	106.472/09/04/2000
51VLUB1306	P1306 LUBE OIL TANK	106.472/09/04/2000
51VLUB1590	EXPANDER OIL CONSOLE	106.472/09/04/2000
51VLUB30	MN1575 LUBE OIL TANK	106.472/09/04/2000
GER-0011	EMERGENCY GENERATOR	106.511/09/04/2000
MSSBLRTOTE	MSS BOILER FEED WATER CHEMICAL USE/TOTE UNLOADING	4056
MSSCBOXDRM	MSS COLD BOX MEOH DRUM LOADING	4056
MSSMEOHTRK	MSSMEOH TOWER TANK LOADING	4056
MSSPROPVENT	MSS PROPYLENE VENT	4056
MSSV655DRM	MSS V655 WASTE DRUM LOADING	4056
MSSV655TRK	MSSV655 RAILCAR/TANK TRUCK LOADING (MEOH/MEOH WAST	106.476/09/04/2000
PROCOUNIT	CO UNIT EMISSIONS	4056

Appendix A

Acronym List **50**

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
COMS ..... continuous opacity monitoring system
CVS ..... closed-vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
DR ..... Designated Representative
ElP ..... El Paso (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
GF ..... grandfathered
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MMBtu/hr ..... Million British thermal units per hour
MRRT ..... monitoring, recordkeeping, reporting, and testing
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PM ..... particulate matter
ppmv ..... parts per million by volume
PSD ..... prevention of significant deterioration
RO ..... Responsible Official
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

[SEQ CHAPTER \h \r 1]Statement of Basis of the Federal Operating Permit

Linde Gas North America LLC

Site Name: Carbon Monoxide Unit
Physical Location: 9502 Bayport Blvd
Nearest City: Pasadena
County: Harris

Permit Number: O1329
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2813
SIC Name: Industrial Gases

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: October 5, 2016

Operating Permit
Basis of Determination

Permit Area Process Description
Synthesis gas, mainly carbon monoxide and hydrogen, is produced by the partial oxidation of natural gas. By-product carbon dioxide from the Ethylene Oxide and Vinyl Acetate Units is also used as a feed. Currently, three parallel reactor/waste heat exchanger trains produce the synthesis gas that feeds the downstream purification equipment.

High purity carbon monoxide product is produced from the synthesis gas using a Rectisol plant for the bulk removal of carbon dioxide, a molecular sieve station for the removal of trace amounts of carbon dioxide, and a Cold Box to separate the carbon monoxide product from the hydrogen. Most of the carbon dioxide that is removed in the Rectisol is recycled to the reactors by the CO_2 recycle compressor.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary

        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient

monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	No
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html"].

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html"]. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
GER-0011	30 TAC Chapter 117, Subchapter B	R7303	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average
GER-0011	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine
51SUMP59	30 TAC Chapter 115, Storage of VOCs	R5111	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
51V1206	30 TAC Chapter 115, Storage of VOCs	R5111	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
51V655	30 TAC Chapter 115, Storage of VOCs	R5112-001	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons Control Device Type = Other vapor destruction unit Throughput = The liquid throughput is greater than 1,500 barrels.
51V655	30 TAC Chapter 115, Storage of	R5112-002	Today's Date = Today's date is March 1, 2013 or later.

Unit ID	Regulation	Index Number	Basis of Determination*
	VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons Control Device Type = Flare Throughput = The liquid throughput is greater than 1,500 barrels.
51V671	30 TAC Chapter 115, Storage of VOCs	R5111	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
51V704	30 TAC Chapter 115, Storage of VOCs	R5112-1	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Flare Throughput = The liquid throughput is greater than 1,500 barrels.
51V704	40 CFR Part 63, Subpart EEEE	63EEEE	Product Stored = Organic HAP containing liquid other than crude oil.
51V778	30 TAC Chapter 115, Storage of VOCs	R5111	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
MSSMEOHTRK	30 TAC Chapter 115, Loading and Unloading of VOC	R5217	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading.

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading less than 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.
MSSV655TRK	30 TAC Chapter 115, Loading and Unloading of VOC	R5217	Chapter 115 Control Device Type = Vapor control system with a flare. Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading less than 20,000 gallons per day. Control Options = Vapor control system that maintains a control efficiency of at least 90%.
51MH5A	30 TAC Chapter 111, Incineration	R111	Hazardous Waste = The unit does not combust hazardous waste as a fuel for energy recover or does not meet the criteria for regulation.
51MH5A	30 TAC Chapter 112, Sulfur Compounds	R2009-01	Effective Stack Height = The effective stack height is equal to or greater than the standard effective stack height.
51MH5A	30 TAC Chapter 117, Subchapter B	R7310-01	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Designated as a Boiler or Industrial Furnace regulated as an existing facility by the EPA in 40 CFR Part 266, Subpart H (as was in effect on June 9, 1993). Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NO_x control method Fuel Type #1 = Natural gas Fuel Type #2 = Liquid NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] Annual Heat Input = Annual heat input is greater than $2.8(10^{11})$ Btu/yr, based on a rolling 12-month average. NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
51MH5A	40 CFR Part 63, Subpart EEE	63EEE	ALT Metals = Complying with the particulate matter standards. Type Fuel = Boiler burns liquid fuel. Existing Source = The boiler is an existing source (construction or reconstruction commenced on or before April 20, 2004). Met Feedrate = Feedrate levels are established as 12-hour rolling average limit for semivolatile and low

Unit ID	Regulation	Index Number	Basis of Determination*
			volatile metals. Area Source = The boiler is a major source as defined under §63.2. CO/THC Stadard = Complying with the CO standard in § 63.1216(a)(5)(i) or (b)(5)(i); or § 63.1217(a)(5)(i) or (b)(5)(i). Baghouse = The boiler is not equipped with a baghouse. Elective Standards = The area source is not electing to comply with § 63.1216 or § 63.1217 per § 266.100(b)(3) and is complying with the Part 266 requirements for particulate matter, hydrogen chloride and chlorine gas, and metals emissions other than mercury. Dioxin/Furan Standard = Complying with the CO standard in § 63.1217(a)(1)(ii) or (b)(1)(ii). Dioxin-Listed = The boiler does not burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027. Heating Value = The hazardous waste as-fired heating value is less than 10,000 Btu/lb. DRE Previous Test = Previous testing was used to document conformance with the DRE standard. Hg Feedrate = Feedrate levels are established as 12-hour rolling average limit for Hg. Feed Zone = The source feeds waste at the normal flame zone.
51MN157	40 CFR Part 60, Subpart A	60A-0018-01	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Non-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
51MN157	40 CFR Part 60, Subpart A	60A-0018-02	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the requirements in 40 CFR § 60.18(c)(3)(i).
51MN157	40 CFR Part 63, Subpart A	RA-001-01	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.
51ANAL	30 TAC Chapter 115, HRVOC Vent Gas	R5727	HRVOC Concentration = The vent gas stream has a HRVOC concentration less than 100 ppmv at all times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt.
51ANAL	30 TAC Chapter 115, Vent Gas Controls	R5127	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is less than 612 ppmv.

Unit ID	Regulation	Index Number	Basis of Determination*
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
51COHEAD	30 TAC Chapter 115, Vent Gas Controls	R5127-1	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
51COHEAD	30 TAC Chapter 115, Vent Gas Controls	R5127-2	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is greater than 100 pounds (45.4 kg). VOC Concentration = VOC concentration is less than 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
GER-0011	30 TAC Chapter 111, Visible Emissions	R1111	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.
MSSPROPVENT	30 TAC Chapter 115, HRVOC Vent Gas	R5720	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr).

Unit ID	Regulation	Index Number	Basis of Determination*
			Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is controlled by a flare. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director has not waived testing for identical vents. Testing Requirements = Process knowledge to determine maximum potential HRVOC hourly emissions for analyzer vents, stream system vents, vent gas streams with no HRVOC except during emission event or degassing safety device in lieu of testing.
MSSPROPVENT	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
51SK01	30 TAC Chapter 115, Degreasing Processes	R5412-01	Solvent Degreasing Machine Type = Cold solvent cleaning machine. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested. Solvent Sprayed = A solvent is sprayed. Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit. Solvent Heated = The solvent is heated to a temperature greater than 120° F. Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine. Drainage Area = Area is greater than or equal to 16 square inches. Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.

* - The "unit attributes" or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

[SEQ CHAPTER \h \r 1]New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html"]

Outdated Standard Exemption lists may be viewed at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html"]

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[HYPERLINK "http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html"]

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 4056	Issuance Date: 12/29/2015
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes,

every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: 51MH5A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R2009-01
Pollutant: SO_2	Main Standard: § 112.9(c)
Monitoring Information	
Indicator: Sulfur Content	
Minimum Frequency: Quarterly	
Averaging Period: N/A	

Deviation Limit: The maximum sulfur concentrations are: --the natural gas to main burner and atomizer is 165 ppmw or 19.43 ppmv --the liquid waste methanol stream is 115 ppmw --the vent gas composition (slip analyzers V-655, V-620) is 20 ppmv.
Basis of monitoring: The heater uses natural gas a primary burner fuel, with waste streams and process vent gas supplementing the fuel. Natural gas is used to start-up and maintain temperature in the heater. All these fuels and air are combined in the combustion chamber. A common way to determine SO2 emissions is by determining the amount (percentage) of sulfur in fuel combusted by an emission unit. This quantity along with stack flow rate and quantity of fuel combusted may be used to calculate the amount of SO2 emitted to the atmosphere.

Unit/Group/Process Information	
ID No.: 51SK01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of § 115.412(1)(A)-(F) shall be considered and reported as a deviation.	
Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.	

Unit/Group/Process Information	
ID No.: GER-0011	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: 20% Opacity	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on **July 12, 2016.**
   Site rating: **3.75 / Satisfactory** Company rating: **4.99 / Satisfactory**
   (High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? .....No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?.....No
2. Is a compliance plan and schedule included in the permit? .....No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes

OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes

Appointment

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 7/25/2018 9:47:26 PM
To: Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]; Witt, Jon [Witt.Jon@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Palma, Ted (Palma.Ted@epa.gov) [Palma.Ted@epa.gov]; Shappley, Ned [Shappley.Ned@epa.gov]
BCC: RTP-OAQPS-C335I/RTP-OAQPS-BLDG-C [RTP-OAQPS-C335I@epa.gov]; RTP-OAQPS-919-541-4376-HEID/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS Ex. 6 Personal Privacy (PP) HEID@epa.gov]

Subject: mtg on EtO facs
Attachments: checklist_july 25 copy of MASTER ETOX etc..xlsx
Location: RTP-OAQPS-C335I/RTP-OAQPS-BLDG-C; RTP-OAQPS Ex. 6 Personal Privacy (PP) HEID/Phone-Line/RTP-OAQPS-BLDG-C

Start: 7/26/2018 1:30:00 PM
End: 7/26/2018 2:30:00 PM
Show Time As: Tentative

Required Attendees: Caparoso, Jennifer; Witt, Jon; Strum, Madeleine; Palma, Ted (Palma.Ted@epa.gov); Shappley, Ned

I don't think we'll need the whole time, but I reserved an hour just in case.

Attached is a list of facilities as a checklist – the same as in the larger Excel file. (All the additional info relevant to our discussion is still in the large sheet.)

I will fill you in on the conversation today and then we will walk through the list and talk about them. Our goal is that by the end of the meeting we will have a list to pass forward.

Thanks for meeting on such short notice. This is a quick-turnaround.

Message

From: Rimer, Kelly [Rimer.Kelly@epa.gov]
Sent: 7/31/2017 7:25:10 PM
To: Houyoux, Marc [Houyoux.Marc@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
CC: Strum, Madeleine [Strum.Madeleine@epa.gov]
Subject: RE: 3pm meeting tomorrow
Attachments: EtO Pager 073117.docx

Hi Mark,

Here is the latest draft of the pager. Erika is reviewing it so it might change a bit.

The purpose of the mtg is to bring Mike up to speed on EtO: The IRIS update, RTR issues, what we are seeing so far in the draft 2014 NATA, what the regions are doing and suggestions for follow-up. It is also to talk to SPPD about them doing some work on further emissions characterization.

We can certainly invite you to mtgs where the inventory is relevant, and that would include this meeting.

Please let me know if looking at the pager provides you with enough information to see whether you want to attend. Alternatively you and I could chat later in the week.

Thanks
Kelly

From: Houyoux, Marc
Sent: Monday, July 31, 2017 2:57 PM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: 3pm meeting tomorrow

Kelly and Darcie,

I hope all is well with you and your group's efforts.

Can you please explain a little more about the 3pm NATA meeting tomorrow? Chet asked me at AQAD staff meeting this morning, but I didn't know anything about it. Madeleine had told me the effort was ongoing with SPPD to further QA the EtO data, but I didn't realize that the meeting tomorrow was about that. Madeleine sent me the link in Sharepoint to the pager, but I don't have permission to read it, and I also don't know to what degree the pager would be used during the meeting.

Both Chet and I have a conflict for the meeting tomorrow (Chet forwarded to me). However, depending on the topic, I may be able to forgo my conflict in favor of this meeting.

Also, in the future, would it be possible just to include me on all invites related to NATA and inventories for GL or DD-level meetings? That would really help me keep on top of these needs to help guide EIAG for improvements in the future.

Thanks much!

Marc

Marc Houyoux
Group Leader
Emissions Inventory and Analysis Group
EPA/OAQPS/AQAD
919-541-3649

Message

From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 8/15/2018 1:01:43 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: EtO facilities in elevated risk tracts

Here's another list, done the same way as before, but now also grabbing facilities in or adjacent to the 100 in a million (total risk) tracts. This list includes the MSA ones you noted below.
I'm sure the facilities you noted that are in the attached list but not on the MSA list are just those with low emissions that don't really drive anything, but still get included because they are in the tracts and they have nonzero emissions…

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

From: Smith, Darcie
Sent: Tuesday, August 14, 2018 6:38 PM
To: Morris, Mark <Morris.Mark@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EtO facilities in elevated risk tracts

No worries – I certainly won't try this at home.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

In the MSA/facility table there are 6 facilities that are not included in your file. They are listed here:

ID	Facility	Address	City	State	Region	NATA tract	NATA block
588911	CRODA INC.	315 CHERRY LANE	NEW CASTLE	Delaware	03	100	153
3699811	Griffith Micro Science Inc	2973 Olympic Industrial Dr.	Smyrna	Georgia	04	200	221
4173711	Medtronic, Inc., Sterile Systems Operation	520 Watson SW	GRAND RAPIDS	Michigan	05	100	273
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	2201 Old Spanish Trail	Westlake	Louisiana	06	100	841
3736811	SHELL TECHNOLOGY CENTER HOUSTON	3333 HWY 6 SOUTH	HOUSTON	Texas	06	300	291
3965211	SOLVAY USA INC	2151 KING ST EXT	CHARLESTON	South Carolina	04	100	240

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Morris, Mark
Sent: Tuesday, August 14, 2018 4:00 PM
To: Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: EtO facilities in elevated risk tracts

Here are the facilities that have EtO emissions in the 106 tracts nationwide with total risk >= 100 in a million. The list does not include facilities that may be just outside a high risk tract and potentially drive the risk of that tract. I have joined all the tract risk data to the list of facilities for the tract it is in.
This was all done by the map app, but don't try this at home.

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 7/28/2017 7:00:19 PM
To: Rimer, Kelly [Rimer.Kelly@epa.gov]; Vasu, Amy [Vasu.Amy@epa.gov]
Subject: RE: Smith, Darcie has shared 'EtO Pager 072817'
Attachments: EtO Pager 072817 072817SP.docx

Hi Amy –

It is attached. Putting in revisions on Monday morning in the online version is okay with me. I don't need them this afternoon.

Thanks!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Rimer, Kelly
Sent: Friday, July 28, 2017 2:50 PM
To: Vasu, Amy <Vasu.Amy@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: Smith, Darcie has shared 'EtO Pager 072817'

Hi
Thanks for working on this you guys.

Ex. 5 Deliberative Process (DP)

From: Vasu, Amy
Sent: Friday, July 28, 2017 2:05 PM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Re: Smith, Darcie has shared 'EtO Pager 072817'

Hi, Darcie -

I am unable to make changes to the document remotely, and I also cannot see the changes that Kelly and you made from the version I edited last night. Would you please email me the version showing the changes so that I can send you edits this afternoon?

Did you both prefer to say that "EtO is a mutagen"?

Thanks.

Amy

From: Smith, Darcie <no-reply@sharepointonline.com>
Sent: Friday, July 28, 2017 11:29 AM
To: Rimer, Kelly; Vasu, Amy
Cc: Smith, Darcie
Subject: Smith, Darcie has shared 'EtO Pager 072817'

Hi - Here's the new version of the EtO pager.

Kelly - I've accepted all your edits and answered your comments where I could.

Amy - Kelly had some comments on the IRIS section.

Please make your edits here and we can all work off the same version.

Thanks,
Darcie

Open EtO Pager 072817.docx

See more related to Smith, Darcie in Delve.

Get the SharePoint mobile app!

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/1/2017 6:17:50 PM
To: Shelow, David [Shelow.David@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]
Subject: FW: EtO Pager for Mike K and DDs 08 01 17.docx
Attachments: EtO Pager for Mike K and DDs 08 01 17.docx

Don't know if you got this or not…

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Rimer, Kelly
Sent: Tuesday, August 01, 2017 11:24 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Houyoux, Marc <Houyoux.Marc@epa.gov>
Subject: EtO Pager for Mike K and DDs 08 01 17.docx

All,

Here is the final pager for the mtg today on EtO. Thanks for your work pulling this together.

Kelly

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/1/2017 3:06:35 PM
To: Sasser, Erika [Sasser.Erika@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]
CC: Vasu, Amy [Vasu.Amy@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: EtO pager for your review
Attachments: EtO Pager 073117_dps.docx

Thanks Erika –

I've accepted your edits, except in a few places. Regarding the NIOSH study, it is actually only one study, that has multiple publications from it, so we left it singular. Also, the hospital sterilizer rule was an area source std, so I don't think it actually has a risk review like the major source MACT rules. If it does, it is not currently on any of the court order/consent decree lists. That would be a good question to ask/answer. The MACT for commercial sterilizers, however, has been through RTR.

Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Sasser, Erika
Sent: Tuesday, August 01, 2017 10:23 AM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EtO pager for your review

This looks good. I had a few small tweaks and one addition at the end—I think Mike and Steve are focused on how we're going to move forward to address this issue, working with the regions on communications etc.

Thanks for the chance to review in advance.

From: Rimer, Kelly
Sent: Monday, July 31, 2017 2:44 PM
To: Sasser, Erika <Sasser.Erika@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Subject: EtO pager for your review

Erika,

Attached is the pager on EtO for Mike and SPPD. The mtg is 3pm tomorrow. Thanks in advance for your review.

There are several aspects of the EtO issue we would like to communicate, so we organized the pager by putting a set of summary bullets at the top, then expanding on each topic in the body of the pager.

Thanks,

Kelly

Kelly Rimer
Leader, Air Toxics Assessment Group
US EPA
Office of Air Quality Planning and Standards
109 TW Alexander Drive
RTP. NC 27709
919-541-5368

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 5/18/2017 6:15:44 PM
To: Morris, Mark [Morris.Mark@epa.gov]
Subject: FW: Chem Sector Facility List
Attachments: Copy of Master Chemical Sector Facility List - 2017-05-17 for ATAG.xlsm

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Diem, Art
Sent: Wednesday, May 17, 2017 12:36 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Lavoie, Tegan <lavoie.tegan@epa.gov>
Subject: Chem Sector Facility List

Hi Darcie,

Please see the attached, much anticipated Chemical Sector Facility List.
Tegan has built this list from several datasets and has attempted to locate as many EIS IDs as possible.
There are 5811 facilities on this list, 3140 have EIS numbers.
Column A, labeled "ID", is a unique number assigned to each facility for index purposes and does not relate to any other numbering system.
Besides EIS IDs , FRS ID and NEI ID are facility identifiers in the sheet. An FRS ID cell may contain more than one FRS ID.
In addition to facility name and locational information, NAICS codes are also listed.

As discussed, we are looking for NATA risk information for these facilities.
Most urgently, we are hoping to get a summary report of facility wide risk for each facility with the top 3 HAP that contribute toward that risk.
Please don't worry about the facilities without EIS numbers, unless there is a quick and easy way to match based on other facility identifiers.
Also, we are hoping to get more detailed information, which would include each pollutant's contribution toward risk at each facility and the risk contribution from each emission source at each facility.

If you have any questions, please feel free to contact Tegan or me.

Thanks,
Art

Art Diem, Environmental Engineer
USEPA Office of Air Quality Planning and Standards,
Sector Policies and Programs Division,
Refining and Chemicals Group
Diem.Art@epa.gov
919-541-1185

ID	FRS ID	NAICS	EIS 2014	NEI ID
0001	110000498131			
0002	110002373244	488320		
0003	110001717768	424710		
0004	110025219092	424710		
0005	110006878600			
0006	110025222328	424710		
0007	110003043830	4883		
0008	110030488620	325311		
0009	110064436052	424710	1133811	
0010	110000491824			
0011	110003043858	424710		
0012				
0013	110002465779	493190	542611	
0014	110025243412			
0015	110007919547	424710	1134711	
0016	110007918664	4883		
0017	110041512538			
0018	110044875668	324110	12681911	
0019	110064041834	488320		NEIAK0226100
0020	110014322571	325222		
0021	110000741234	325320	1061911	
0022	110043792278	325220	1060311	
0023	110000741243	325998	949811	
0024	110025376448	325199	1062311	
0025	110000747817	325180	1062111	
0026	110001716787	325110	1055211	
0027	110000765636	325510	1003811	
0028	110021287748	325320	1056511	
0029	110000830469	493190	1001511	
0030	110000367013	325510		
0031	110000367031	325510	1110211	
0032	110000366657	331110	948811	
0033	110001713478	326199	7919711	NEIALT$4492
0034	110069446120	999999		
0035	110025375895	325998	1003211	
0036	110041647466	325412	16608111	
0037	110000366782	325510	7213711	
0038	110039130231	999999		
0039	110000367852	325222		
0040	110003379781	325222		
0041	110017438762	325211	1020111	
0042	110055053926	325211	1028811	
0043	110000367647	325120	966811	
0044	110000589373	325311	7212911	
0045	110000589729	325180	1062611	

Facility Name
TESORO ALASKA COMPANY ANCHORAGE TERMINAL
Port of Anchorage Terminal No 3 Wharf
AMERICAN PRESIDENTS LINE DUTCH HARBOR TERMINAL
Western Pioneer Dutch Harbor Wharf
City of Haines P O L Terminal Dock
Taku Oil Sales Juneau Terminal Wharf
Delta Western Juneau Wharf
AGRIUM US INC / KENAI NITROGEN OPERATIONS PLANT
TESORO ALASKA COMPANY, LLC / KENAI PIPELINE (KPL) FACILITY
TESORO ALASKA KETCHIKAN TERMINAL (Formerly: Unocal Petroleum Products Ketchikan Terminal Whar)
PETRO MARINE SERVICES - KETCHIKAN
King Cove Deep Water City Dock
DMTS Port Facility
Crowley Marine Services Kotzebue Dock
Kenai Pipeline Co Nikiski Terminal Wharf
City of Nome Snake River Cargo Dock
Tyonek Native Corp North Foreland Wharf
North Pole Refinery
ALYESKA PIPELINE SERVICE COMPANY / VALDEZ MARINE TERMINAL
SHAW INDUSTRIES GROUP INC. PLANT 65
E I DUPONT DE NEMOURS & CO
Lenzing Fibers Inc
AKZO NOBEL FUNCTIONAL CHEMICALS LLC
ARKEMA INC
U.S. AMINES (BUCKS) LLC
GRAPHITE AND CARBON PRODUCTS
TITAN COATINGS, INC.
BPI,INC.
Buckeye BIRMINGHAM TERMINAL
Akzo Nobel Coatings, Inc.
Induron Protective Coatings
ERP COMPLIANT COKE PLANT/UTILITIES/WASTEWATER
GLASFORMS, INC.
SLOSS INDUSTRIES CORPORATION - CHEMICAL
ALLWORTH, INC.
Evonik Corporation
Valspar Corporation, Packaging Coatings Group (formerly Dexter Packaging Products, Birmingham)
RIDDELL/ALL AMERICAN SPORTS CORPORATION
BEAULIEU FIBERS
BEAULIEU FABRICS
SABIC US INNOVATIVE PLASTICS LLC
Cray Valley USA LLCformerly Sartomer Company Inc
Boc Gases (Permit name: Linde Inc.)
Cherokee Nitrogen Company
Honeywell UOP (formerly UOP LLC)

Street
1522 PORT ROAD
2000 Anchorage Port Road
1125 E POINT RD
1561 BALLY HOO RD
LUTAK POINT RD, MILE 3.5, PO BOX 1049
1076 JACOBSEN DR
449 West Willoughby Avenue
47769 Kenai Spur Hwy
MILE 22.5 KENAI SPUR HIGHWAY
1100 Stedman Street.
1100 STEDMAN ST
55 Miles NW of Kotzebue
Mile 22.5 North Kenai Road
SNAKE RIVER CARGO DOCK
1100 H and H Lane
WEST END OF DAYVILLE ROAD
200 WAITES DR
12650 HIGHWAY 43 NORTH
12950 Highway 43 North
13440 HWY 43 N
13755 US-43
14086 HWY 43 NORTH
1225 Industrial PKWY
2025 Exchange PL
300 32nd ST N
1600 Mims AVE SW
1629 Vanderbilt Rd.
3333 Richard Arrington Jr Blvd North
3500 35th Ave N
3943 VALLEY EAST INDUSTRIAL DR
4200 F.L. SHUTTLESWORTH DRIVE
500 Medco RD
750 Lakeshore PKWY
90 Carson Road
907C ALTON
202 JACOBS AVE
236 BEAULIEU DR.
ONE PLASTICS AVENUE
Hwy 17 S
1040 Industrial Dr.
1080 Industrial Drive
1 Linde Drive

City	County/District (CA)	State	Zip
ANCHORAGE	ANCHORAGE BOROUGH	AK	99519-
ANCHORAGE	ANCHORAGE BOROUGH	AK	99501-
DUTCH HARBOR		AK	99692-
DUTCH HARBOR		AK	99692-
HAINES		AK	99827-
JUNEAU		AK	99801-
JUNEAU		AK	99801-1727
KENAI	KENAI PENINSULA	AK	99611-
KENAI	Kenai Peninsula Borough	AK	99611-
KETCHIKAN	KETCHIKAN GATEWAY	AK	99901-
KETCHIKAN	KETCHIKAN GATEWAY	AK	99901-
KING COVE		AK	
Kotzebue	Northwest Arctic Borough	AK	99752-
KOTZEBUE	Northwest Arctic Borough	AK	
NIKISKI	Kenai Peninsula Borough	AK	99611-
NOME		AK	99762-
NORTH FORELAND		AK	
North Pole	Fairbanks North Star Borough	AK	99705-
VALDEZ		AK	99686-
ANDALUSIA	COVINGTON	AL	36420-
AXIS	Mobile County	AL	36505-
Axis	Mobile County	AL	36505-
AXIS	Mobile County	AL	36505-
AXIS	Mobile County	AL	36505-
AXIS	Mobile County	AL	36505-
Bessemer	Jefferson County	AL	35020-
Bessemer	Jefferson County	AL	35022-
Bessemer	Jefferson County	AL	35020-
Birmingham	Jefferson County	AL	35211-
Birmingham	JEFFERSON	AL	35234-
Birmingham	Jefferson County	AL	35234-
BIRMINGHAM	Jefferson County	AL	35207-
BIRMINGHAM	Jefferson County	AL	35217-
BIRMINGHAM	JEFFERSON	AL	35207-
Birmingham	Jefferson County	AL	35217-
Birmingham	Jefferson County	AL	35211-
Birmingham	Jefferson County	AL	35215-
BIRMINGHAM	Jefferson County	AL	35210-
BRIDGEPORT	JACKSON	AL	35740-
BRIDGEPORT	JACKSON	AL	35740-
BURKVILLE	Lowndes County	AL	36752-
Chatom	Washington County	AL	36518-
Cherokee	Colbert County	AL	35616-
Cherokee	Colbert County	AL	35616-
Chickasaw	Mobile County	AL	36611-

Latitude	Longitude
60.808079	-148.940007
61.237576	-149.888149
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53.888521	-166.533862
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67.577000	-164.053700
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0060	110000753943	325312	952611	
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0087	110001143352	424710		
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CHEMCRAFT - AKZO NOBEL COATINGS INC (formerly Peerless Coatings, Inc.)
ASCEND PERFORMANCE MATERIALS LLC
AlphaPet Inc
3M COMPANY
BP Amoco Chemicals
INDORAMA XYLENES & PTA LLC
BASF Decatur Coatings Facility
Toray Fluorofibers America Inc
Hexcel Corporation
Linde Gas North America LLC
DAIKIN AMERICA INC. / MDA Manufacturing, Inc.
DAIKIN AMERICA INC. / MDA Manufacturing, Inc.
DAIKIN AMERICA INC. / MDA Manufacturing, Inc.
DAIKIN AMERICA INC. / MDA Manufacturing, Inc.
SAFETYKLEEN CORP.
Tessenderlo Kerley Inc
Remuriate Technologies L.L.C.
Royster-Clark Inc
3M COMPANY
ISP Chemicals Inc
HONDA MANUFACTURING OF ALABAMA LLC
BASF CORPORATION
HUNTSMAN ADVANCED MATERIALS
KEMIRA WATER SOLUTIONS INC
MIDSTREAM FUEL SERVICE, MOBILE WHARF.
ARMSTRONG WORLD INDUSTRIES INC
ALABAMA BULK TERMINAL COMPANY
MOBILE ROSIN OIL CO INC
SHELL CHEMICAL LP - Blakeley Island Terminal
Plains Marketing LP
Alabama State Docks Department Pier C
HYUNDAI MOTOR MANUFACTURING ALABAMA LLC.
Occidental Chemical Corporation
WEST POINT STEVENS, INC. - GRIFFTEX CHEMICALS
QUANTEGY INC
Continental Carbon Company
International Paper Company
Dynea Usa Inc
EVONIK CORPORATION
CREANOVA INC. - possible that Evonik includes both sites
Mobile Paint Manufacturing Company
INEOS PHENOL
HUNT REFINING COMPANY
WARRIOR ASPHALT REFINING CO INC.
TRANSMONTAIGNE - ARKANSAS CITY TERMINAL
FUTUREFUEL CHEMICAL COMPANY
ALMATIS INC-BAUXITE

1611 22nd Street, S.E.
1050 CHEMSTRAND AVE
1301 Finley Island Road
1400 STATE DOCKS RD
1401 Finley Island Rd
1401 FINLEY ISLAND RD
152 Ipsco Road
2032 Highway 20
3300 Mallard Fox Dr
900 Linde Lane Hwy 20
905 STATE DOCKS RD
905 STATE DOCKS RD
905 STATE DOCKS RD
905 STATE DOCKS RD
1002 Hoke AVE
1431 State Docks Rd.
TIN MILL ROAD
1 Commerce St.
6675 US HWY 43
BLDG 5565 INDUSTRIAL RD
1800 HONDA DR
1379 CIBA ROAD
555 HUNTSMAN ROAD
1 Cyanamid Rd
1231 COCHRAN BRIDGE CAUSEWAY
1251 BAKER ST
195 COCHRANE CSWY
2469 BRAGDON AVE.
1105 Cochran Causeway
Magazine Point Bay Bridge Road
700 HYUNDAI BLVD
1000 N Wilson Dam Rd
1900 CUNNINGHAM DRIVE
2230 MARVYN PKWY
1500 E State Docks Rd
100 Jensen Rd
14139 U.S. 84
4201 DEGUSSA RD
4301 DEGUSSA RD
4775 Hamilton Boulevard
7770 RANGELINE ROAD
1855 FAIRLAWN RD
3100 WARRIOR ROAD
HIGHWAY 4 EAST
2800 GAP ROAD
4701 ALCOA RD

Cullman	CULLMAN	AL	35055-
DECATUR	Morgan County	AL	35601-
Decatur	Morgan County	AL	35601-
DECATUR	Morgan County	AL	35601-
Decatur	Morgan County	AL	35609-
DECATUR	MORGAN	AL	35601-
Decatur	MORGAN	AL	35601-
Decatur	Morgan County	AL	35601-
Decatur	Morgan County	AL	35601-
Decatur	Morgan County	AL	35601-
DECATUR	Morgan County	AL	35609-
DECATUR	Morgan County	AL	35609-
DECATUR	Morgan County	AL	35609-
DECATUR	Morgan County	AL	35609-
Dolomite	Jefferson County	AL	35061-
Eufaula	Barbour County	AL	36027-
Fairfield	Jefferson County	AL	35064-
Florence	Lauderdale County	AL	35631-
GUIN	Marion County	AL	35563-
Huntsville	Madison County	AL	35898-
LINCOLN	Talladega County	AL	35096-
MCINTOSH	Washington County	AL	36553-
MCINTOSH	Washington County	AL	36553-
Mobile	Mobile County	AL	36610-
MOBILE	MOBILE	AL	36610-
MOBILE	MOBILE	AL	36603-
MOBILE	Mobile County	AL	36602-
MOBILE	MOBILE	AL	36617-
MOBILE	MOBILE	AL	36602-
Mobile	Mobile County	AL	36601-
MOBILE	Mobile County	AL	
MONTGOMERY	Montgomery County	AL	36105-
Muscle Shoals	Colbert County	AL	35661-
Opelika	LEE	AL	36801-
OPELIKA	LEE	AL	36804-
Phenix City	Russell County	AL	36869-
Prattville	Autauga County	AL	36067-
River Falls	Covington County	AL	36476-
THEODORE	Mobile County	AL	36582-
THEODORE	MOBILE	AL	36582-
THEODORE	MOBILE	AL	36582-
THEODORE	Mobile County	AL	36582-
TUSCALOOSA	Tuscaloosa County	AL	35401-
TUSCALOOSA	Tuscaloosa County	AL	35404-
ARKANSAS CITY		AR	71630-
BATESVILLE	Independence County	AR	72501-
BAUXITE	Saline County	AR	72011-

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GEORGIA-PACIFIC CORPORATION
GEORGIA PACIFIC CHEMICALS
ESTERLINE ARMTEC COUNTERMEASURE
LION OIL COMPANY
GREAT LAKES CHEMICAL - CENTRAL PLANT
TETRA Technologies, Inc.
GREAT LAKES CHEMICAL - SOUTH PLANT
EL DORADO TERMINAL (Permit name: ENTERPRISE REFINED PRODUCTS CO)
EL DORADO CHEMICAL COMPANY-EL DORADO
ASH GROVE CEMENT
TE PRODUCTS PIPELINE COMPANY
Borden Chemical Inc
Ashland Chemical
CRANE COMPOSITES, INC.
Albemarle Corp West Plant
ALBEMARLE CORPORATION-SOUTH PLANT
Great Lakes Chemical Corp-West Plant
EVONIK CYRO INDUSTRIES
BASF CORPORATION
Tetra Chemicals
U.S. ARMY - PINE BLUFF ARSENAL
APACHE NITROGEN
PROFESSIONAL CHEMICALS CORP
Arizona Environmental Container Corp
Praxair Inc - Kingman Facility
Pinal Energy
PROCLEAN OF ARIZONA INC
SFPP LP Phoenix Terminal
Fuji Film Electronic Materials USA
CROP PRODUCTION SERVICES INC
TETRA TECHNOLOGIES, INC. - AMB
Cytec Aerospace Materials
PHILLIPS66 - SANTA MARIA REFINERY
REICHHOLD INC - AZUSA FACILITY
DELTA TRADING L P (Permit name CRIMSON RENEWABLE ENERGY LP)
JR SIMPLOT CO/SIMPLOT GROWER SOLUTIONS
ENNIS PAINT INC
CROP PRODUCTION SERVICES INC
LAS PALMAS OIL & DEHYDRATION
PIONEER PAINT CO
KERN OIL & REFINING CO
PLAINS MARKETING LP
SIMPLOT SOILBUILDERS - BALLICO
HENKEL CORP (formerly Dexter Aerospace Materials)
NIKON PRECISION INC
CCL ORGANICS LLC
PRAXAIR, INC

100 Mill Supply Road
124 PAPER MILL ROAD
HIGHLAND INDUSTRIAL PARK,#M-25
1000 MC HENRY ST
2226 HAYNESVILLE HIGHWAY
295 FEED MILL RD
324 SOUTHFIELD CUTOFF ROAD
331 OLD CALION ROAD
4500 NORTH WEST AVENUE
4343 HIGHWAY 108
826 OLD HIGHWAY
185 N. Industrial Dr.
1901 REDMOND RD.
8500 CW POST ROAD
1550 Hwy. 371 S.
2270 HIGHWAY 79 SOUTH
5821 Shuler Road
1500 RICHARD PREWITT DR.
100 BRIDGEPORT ROAD
2201 Port Rd
STATE HWY 365 SOUTH
1436 SOUTH APACHE POWDER ROAD
325 S PRICE RD.
850 N. Davidson Blvd
I-40 & Griffith Rd.
38585 W Cowtown Rd
4315 W. VAN BUREN ST.
49 N 53rd Ave
6550 S. Mountain Rd.
3201 AVENUE 54
15750 SALTUS ROAD
1440 N. Kraemer Boulevard
2555 WILLOW RD
237 SOUTH MOTOR AVENUE
17731 MILLUX RD-PALOMA BLENDING FACILITY
19421 CREEK RD
200 2ND ST
2010 NORRIS RD
3121 STANDARD ST
4620 EASTON DR
PANAMA LN & WEEDPATCH HWY
TEN SECTION PUMP STATION
10985 BALLICO AVE
2850 Willow Pass Rd.
1399 SHOREWAY ROAD
1460 GOODYEAR ROAD
331 E CHANNEL ROAD

CROSSETT	Ashley County	AR	71635-
CROSSETT	Ashley County	AR	71635-
East Camden	Calhoun County	AR	71701-
EL DORADO	Union County	AR	71730-
EL DORADO	Union County	AR	71730-
El Dorado	Union County	AR	71730-
EL DORADO	Union County	AR	71730-
EL DORADO	Union County	AR	71730-6020
EL DORADO	Union County	AR	71730-
FOREMAN	Little River County	AR	71836-
HELENA	PHILLIPS	AR	72342-3909
Hope	Hempstead County	AR	71801-8802
Jacksonville		AR	72076-
JONESBORO	CRAIGHEAD	AR	72401-
Magnolia	Columbia County	AR	71753-
MAGNOLIA	Columbia County	AR	71753-
Marysville	Union County	AR	71753-
Osceola	MISSISSIPPI	AR	72370-
WEST MEMPHIS	Crittenden County	AR	72301-
West Memphis	Crittenden County	AR	72301-
WHITE HALL	Jefferson County	AR	71602-9500
BENSON	Cochise County	AZ	85602-
CHANDLER	MARICOPA	AZ	85224-
Eloy	Pinal County	AZ	85131-
Kingman	Mohave County	AZ	86401-
Maricopa	Pinal County	AZ	85138-
PHOENIX	Maricopa County	AZ	85043-
Phoenix	Maricopa County	AZ	85043-
Queen Creek	Maricopa County	AZ	85242-
ALPAUGH	SAN JOAQUIN VALLEY APCD	CA	93201-
AMBOY	MOJAVE DESERT AQMD	CA	92304-
Anaheim	SOUTH COAST AQMD	CA	92807-
ARROYO GRANDE	SAN LUIS OBISPO COUNTY APCD	CA	93420-
AZUSA	SOUTH COAST AQMD	CA	#N/A
BAKERSFIELD	SAN JOAQUIN VALLEY APCD	CA	93313-
BAKERSFIELD	SAN JOAQUIN VALLEY APCD	CA	93314-
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BALLICO	SAN JOAQUIN VALLEY APCD	CA	95303-
Pittsburg	BAY AREA AQMD	CA	94565-
BELMONT	BAY AREA AQMD	CA	94002-
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NUSTAR LOGISTICS, L P
VALERO REFINING COMPANY - CALIFORNIA
ACROMETRIX CORPORATION
W R MEADOWS INC /WESTERN DIV
PRECISION TECHNICAL COATINGS
XOMA US LLC
DAVLIN COATINGS LLC
SIEMENS HEALTHCARE DIAGNOSTICS, INC
HENKEL CORPORATION
BAYER HEALTHCARE LLC
XOMA (US) LLC
XOMA (US) LLC
XOMA CORPORATION
ACTAGRO, LLC.
SFPP, L.P.
CALGON CARBON CORP.
SFPP, LP
TETRA TECHNOLOGIES, INC - LEE
OPTIMUM OPTICAL SYSTEMS INC
ALLERGAN INC
PHILLIPS 66 COMPANY/LOS ANGELES REFINERY
TESORO REFINING & MARKETING CO LLC
TESORO REFINING & MARKETING CO LLC
TESORO REFINING & MARKETING CO LLC
GATX Carson Facility
PRAXAIR INC
PRAXAIR INC
SOLVAY USA, INC.
POLY ONE CORPORATION
TESORO REFINING AND MARKETING CO, LLC
AIR PROD & CHEM INC - carson
TESORO REFINING & MARKETING CO, LLC
INEOS POLYPROPYLENE LLC
TESORO CARSON CRUDE TERMINAL
KINDER MORGAN LIQUIDS TERMINALS LLC
AEMETIS ADVANCED FUELS KEYES INC
COSMETIC LABORATORIES OF AMERICA
LEVLAD LLC
NORTH VALLEY DISPOSAL
CORLIN PAINT
EARTHWORM SOIL FACTORY
SHIELD PACKAGING OF CAL INC
FLINT GROUP NORTH AMERICA CORP
Hill Brothers Chemical Co
PHILLIPS 66 PIPELINE LLC
PHILLIPS 66 PIPELINE LLC
Ashland Chemical

3400 E 2ND STREET
3400 E 2ND STREET
6010 EGRET COURT
652 INDIANA STREET
1220 4TH STREET
2910 W 7TH STREET
700 ALLSTON WAY
725 POTTER STREET
742 GRAYSON STREET
800 DWIGHT WAY
804 HEINZ STREET
890 HEINZ
901 HEINZ STREET
4516 N HOWARD ST
2359 RIVERSIDE AVE
431 HATCHERY ROAD
950 TUNNEL AVENUE
1600 LEE CHEMICAL DRIVE
4153 CALLE TESORO
503 VANDELL WAY, SUITE B
1520 E SEPULVEDA BLVD
1801 E SEPULVEDA
1801 E SEPULVEDA
1801 E SEPULVEDA
2000 E. Sepulveda Blvd
2006 E 223 ST
2006 E 223 ST
20720 S WILMINGTON AVE
2104 E 223RD ST
23208 S ALAMEDA ST
23300 S ALAMEDA ST
2350 E 223RD ST
2384 E 223RD ST
24696 WILMINGTON AVENUE
2900 E SEPULVEDA BLVD
4209 JESSUP RD
20245 SUNBURST ST
9200 MASON AVE
4441 COHASSET RD
46 LOREN AVENUE
704 NEAL ROAD
5165 G ST
13055 TEMPLE AVE
15017 E. Clark Ave.
JUNCTION PUMP STATION, 14990 HWY 46
JUNCTION PUMP STATION, 14990 HWY 46
291 W Adams St

BENICIA	BAY AREA AQMD	CA	94510-
BENICIA	BAY AREA AQMD	CA	94510-
BENICIA	BAY AREA AQMD	CA	94510-
BENICIA	BAY AREA AQMD	CA	94510-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BERKELEY	BAY AREA AQMD	CA	94710-
BIOLA	SAN JOAQUIN VALLEY APCD	CA	93630-
BLOOMINGTON	SOUTH COAST AQMD	CA	92316-
BLUE LAKE	NORTH COAST UNIFIED AQMD	CA	95525-
BRISBANE	BAY AREA AQMD	CA	94005-
CADIZ	MOJAVE DESERT AQMD	CA	92319-
CAMARILLO	VENTURA COUNTY APCD	CA	93012-
CAMPBELL	BAY AREA AQMD	CA	95008-
CARSON	SOUTH COAST AQMD	CA	90745-
CARSON	SOUTH COAST AQMD	CA	#N/A
CARSON	SOUTH COAST AQMD	CA	#N/A
CARSON	SOUTH COAST AQMD	CA	#N/A
Carson	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90810-
CARSON	SOUTH COAST AQMD	CA	90745-6126
CARSON	SOUTH COAST AQMD	CA	90810-
CERES	SAN JOAQUIN VALLEY APCD	CA	95307-
CHATSWORTH	SOUTH COAST AQMD	CA	91311-
CHATSWORTH	SOUTH COAST AQMD	CA	91311-
CHICO	BUTTE COUNTY AQMD	CA	95973-
CHICO	BUTTE COUNTY AQMD	CA	95928-
CHICO	BUTTE COUNTY AQMD	CA	95928-
CHINO	SOUTH COAST AQMD	CA	91710-
CITY OF INDUSTRY	SOUTH COAST AQMD	CA	91746-
City Of Industry	SOUTH COAST AQMD	CA	91745-
LOST HILLS	SAN JOAQUIN VALLEY APCD	CA	93210-
LOST HILLS	SAN JOAQUIN VALLEY APCD	CA	93210-
Colton	SOUTH COAST AQMD	CA	92324-

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38.074950	-122.144710
38.083900	-122.108070
38.072910	-122.127680
37.878390	-122.303300
37.850970	-122.291920
37.862690	-122.297700
37.851000	-122.294700
37.854480	-122.295980
37.857850	-122.295920
37.853090	-122.293690
37.853420	-122.292510
37.853670	-122.292160
36.801330	-120.015410
34.058710	-117.370230
40.879030	-123.991860
37.692221	-122.399240
34.265250	-115.366840
37.265320	-121.956580
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33.813230	-118.242980
33.813230	-118.242980
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33.824270	-118.239780
33.843390	-118.235070
33.824270	-118.237260
33.814280	-118.232220
33.811570	-118.233190
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33.824160	-118.231290
34.028650	-118.429480
37.551290	-120.916290
34.234240	-118.574700
34.237630	-118.579780
39.791000	-121.844000
39.702000	-121.790000
39.664840	-121.734690
34.009870	-117.692180
34.057740	-117.997940
34.016940	-117.982780
35.646760	-119.955850
35.646760	-119.955850
34.050880	-117.328680

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0181	110009530908	49311		
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0183	110024415177	325211	10316411	
0184	110041055666	325613	15764711	
0185	110000474264	325211	13491411	
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0190	110006530753	325211	3136911	
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0205	110000485715	325211	4840511	NEIART$10736
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0208	110038083837	325412	10497011	
0209	110058882384	325211	17186711	
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0223	110001170072	325413	13812211	
0224	110039561738	32512	13816411	
0225	110054203633	325199	13799511	

Ashland Chemical
SIMPLOT SOILBULDERS - COLUSA
KTR CLA II LLC (formerly ICI Paints - Sinclair)
ASHLAND SPECIALTY CHEMICAL COMPANY
PERFORMANCE COMPOSITES, INC
HENKEL ELECTRONIC MATERIALS, LLC
PLASKOLITE INC
PLAINS WEST COAST TERMINALS LLC
Tnemec Company Incorporated
CERUS CORPORATION
BUTTONWILLOW WAREHOUSE CO
PREPRODUCTION PLASTICS, INC
SHORE TERMINALS - SELBY
DURECT CORPORATION
APPLE INC
BAYER CROPSCIENCE LP
GENENTECH, INC.
INX INTERNATIONAL INK CO.
THE TREMONT GROUP, INC. TSI DIVISION
SYNAGRO WEST, INC DBA CENTRL VLY COMPOST
OLD DURHAM WOOD
WILBUR-ELLIS COMPANY
AFFTC/AIR FORCE RESEARCH LABORATORY
WILBUR-ELLIS COMPANY
AIR LIQUIDE LARGE INDUSTRIES U.S., LP
CHEVRON USA PRODUCTS CO.
GEORGIA PACIFIC CORP
NOVARTIS VACCINES AND DIAGNOSTICS
AMYRIS
XOMA (US) LLC
TENCATE ADVANCED COMPOSITES, INC
SUNPOL RESINS & POLYMERS, INC
CLOROX PRODUCTS MANUFACTURING COMPANY
UNIVERSAL PROPULSION COMPANY,
JR SMPLOT CO/SIMPLOT GROWER SOLUTIONS
CROP PRODUCTION SERVICES INC
JR SIMPLOT CO/SIMPLOT GROWER SOLUTIONS
CONTINENTAL COATINGS INC
SPECIALTY FINISHES CO
US ARMY NATIONAL TRAINING CTR.
LBA REALTY
LBA REALTY
TOURNESOL SITEWORKS
TESLA MOTORS, INC
THERMO FISHER SCIENTIFIC
AIR LIQUIDE INC
INTEMATIX CORPORATION

291 W Adams St
2947 HIGHWAY 20
6100 S. Garfield Avenue
6608 E 26TH ST
1418 S ALAMEDA ST
20021 SUSANA RD
2225 E DEL AMO BLVD
2500 E VICTORIA ST
417 E. Weber Street
2550 STANWELL
715 YODER BLVD
210 TELLER ST
90 SAN PABLO AVENUE
10240 BUBB ROAD
20400 MARIANI AVENUE
1540 DREW AVENUE
2727 FITZGERALD DRIVE
405 INDUSTRIAL WAY
7235 TREMONT ROAD
13757 S HARMON RD
1156 OROVILLE CHICO HIGHWAY
5613 ROAD 160
5 E. POPSON AVE. BLDG. 2560A
782 W WASHINGTON RD
324 W EL SEGUNDO BLVD
324 W EL SEGUNDO BLVD
10399 STOCKTON BLVD
4560 HORTON STREET
5850 HOLLIS STREET
5850 HOLLIS STREET, X 6
2450 CORDELIA ROAD
2475 CROCKER CIRCLE
2600 HUNTINGTON DRIVE
3530 BRANSCOMBE ROAD
35836 W BULLARD
5018 SANTA FE GRADE
21817 FRESNO-COALINGA RD
10938 BEECH AVE
15310 ARROW ROUTE
ENVR. DIV BLDG 385 BOX 105097
34781 CAMPUS DRIVE
34801 CAMPUS DRIVE
42326 ALBRAE STREET
45500 FREMONT BLVD
46360 FREMONT BLVD
46405 LANDING PKWY
46410 SO FREMONT BLVD

Colton	SOUTH COAST AQMD	CA	92324-
COLUSA	COLUSA COUNTY APCD	CA	95932-
Commerce	SOUTH COAST AQMD	CA	90040-
Commerce	SOUTH COAST AQMD	CA	90040-
COMPTON	SOUTH COAST AQMD	CA	90221-
COMPTON	SOUTH COAST AQMD	CA	90221-
COMPTON	SOUTH COAST AQMD	CA	90220-
COMPTON	SOUTH COAST AQMD	CA	90220-
Compton	SOUTH COAST AQMD	CA	90222-
CONCORD	BAY AREA AQMD	CA	94520-
CORCORAN	SAN JOAQUIN VALLEY APCD	CA	93212-
CORONA	SOUTH COAST AQMD	CA	92879-
CROCKETT	BAY AREA AQMD	CA	94525-
CUPERTINO	BAY AREA AQMD	CA	95014-
CUPERTINO	BAY AREA AQMD	CA	95014-
DAVIS	YOLO/SOLANO AQMD	CA	95618-
DIXON	YOLO/SOLANO AQMD	CA	95620-
DIXON	YOLO/SOLANO AQMD	CA	95620-
DIXON	YOLO/SOLANO AQMD	CA	95620-
DOS PALOS	SAN JOAQUIN VALLEY APCD	CA	93620-
DURHAM	BUTTE COUNTY AQMD	CA	95938-
EARLIMART	SAN JOAQUIN VALLEY APCD	CA	93219-
EDWARDS AFB	MOJAVE DESERT AQMD / EASTERN KERN APCD	CA	93523-
EL NIDO	SAN JOAQUIN VALLEY APCD	CA	95317-
EL SEGUNDO	SOUTH COAST AQMD	CA	90245-
EL SEGUNDO	SOUTH COAST AQMD	CA	90245-
ELK GROVE	SACRAMENTO METROPOLITAN AQMD	CA	95624-
EMERYVILLE	BAY AREA AQMD	CA	94608-
EMERYVILLE	BAY AREA AQMD	CA	94608-
EMERYVILLE	BAY AREA AQMD	CA	94608-
FAIRFIELD	BAY AREA AQMD	CA	94534-
FAIRFIELD	BAY AREA AQMD	CA	94533-
FAIRFIELD	BAY AREA AQMD	CA	94533-
FAIRFIELD	BAY AREA AQMD	CA	94533-
FIREBAUGH	SAN JOAQUIN VALLEY APCD	CA	93622-
FIREBAUGH	SAN JOAQUIN VALLEY APCD	CA	93622-
FIVE POINTS	SAN JOAQUIN VALLEY APCD	CA	93624-
FONTANA	SOUTH COAST AQMD	CA	92337-
FONTANA	SOUTH COAST AQMD	CA	92335-
FORT IRWIN	MOJAVE DESERT AQMD	CA	92310-
FREMONT	BAY AREA AQMD	CA	94536-
FREMONT	BAY AREA AQMD	CA	94555-
FREMONT	BAY AREA AQMD	CA	94538-
FREMONT	BAY AREA AQMD	CA	94538-
FREMONT	BAY AREA AQMD	CA	94538-
FREMONT	BAY AREA AQMD	CA	94538-
FREMONT	BAY AREA AQMD	CA	94538-

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0271	110018953532	424710	4940211	

AIR LIQUIDE ELECTRONICS US
BOEHRINGER INGELHEIM FREMONT INC
BOEHRINGER INGELHEIM FREMONT INC
J.R. SIMPLOT / FRENCH CAMP
GUSMER ENTERPRISES INC
BAYER CROP SCIENCE
CROP PRODUCTION SERVICES INC
FAENCAL TARTARIC PRODUCTS INC
WILBUR-ELLIS COMPANY
OLSON & COMPANY STEEL
CREATIVE MARKETING RESEARCH INC / MONTEREY CHEMICAL COMPANY
CREATIVE MARKETING RESEARCH INC / MONTEREY CHEMICAL COMPANY
PONDEROSA PAINT CO., INC.
SFPP, L.P.
TESSENDERLO KERLEY, INC
DUNCAN ENTERPRISES
VISTA PAINT CORP
NBTY ACQUISITION LLC, DBA LEINER HEALTH
IPS Corporation
VALSPAR COATINGS (fomerly Lilly Industries (USA), Inc.)
CUSTOM DESIGN COUNTERTOPS
Z-BEST COMPOSTING FACILITY
VENOCO - ELLWOOD MARINE TERMINAL
VENOCO-ELLWOOD MARINE TERMINAL-JOVALAN
CALIFORNIA AMMONIA COMPANY
TESSENDERLO KERLEY, INC.
CORE AGRI LLC
HELENA CHEMICAL COMPANY
Henkel Corporation
IMPAX LABORATORIES, INC
BAXALTA US INC
P & S SALES
STILES PAINT MFG INC
ROYAL CHEMICAL COMPANY
ROHM AND HAAS CHEMICALS LLC
IMPAX LABORATORIES, INC
IMPAX LABORATORIES, INC
IMPAX LABORATORIES, INC
IMPAX PHARMACEUTICALS INC
DUPOINT PIONEER
INTEGRO INC
BIO-RAD LABORATORIES
BIO RAD
MCCORMICK SELPH, INC.
TRICAL INC.
LAIRD COATINGS CORPORATION
CHEVRON HUNTINGTON BEACH TERMI NAL

5121 BRANDIN COURT
6397 KAISER DRIVE
6701 KAISER DRIVE
8858 S PRIEST RD
124 M ST
266 S MONROE
2819 S MAPLE AVE
2886 S MAPLE AVE
2903 S CEDAR AVE
3488 W ASHLAN AVE
3594 E WAWONA AVE
3594 E WAWONA AVE
3663 N CLOVIS AVE
4149 S MAPLE AVE
5427 E CENTRAL AVE
5673 E SHIELDS AVE
2020 E ORANGETHORPE
7366 ORANGEWOOD AVE
17109 S. Main St.
210 EAST ALONDRA BLVD
20780 GEYSERVILLE AVE
980 STATE HIGHWAY 25
7979 HOLISITER AVE
JOVALAN BARGE
2229 HWY 45
10724 ENERGY STREET
11521 EXCELSIOR AVE
8148 LACEY BOULEVARD
12607 Cerise Ave
1490 CROCKER AVENUE
1978 W WINTON AVE
20943 CABOT BLVD
21595 CURTIS STREET
2498 AMERICAN AVE
25500 WHITESELL ST
30831 HUNTWOOD AVE
30941 SAN CLEMENTE ST
31047 GENSTAR ROAD
31153 SAN ANTONIO RD
4030 POINT EDEN WAY
16423 W KAMM
2000 ALFRED NOBEL DR
6000 JAMES WATSON DR
3601 UNION ROAD
8770 HWY 25 P O BOX 1327
15541 COMMERCE LN
17881 GOTHARD STREET

FREMONT	BAY AREA AQMD	CA	94538-
FREMONT	BAY AREA AQMD	CA	94555-
FREMONT	BAY AREA AQMD	CA	94555-
FRENCH CAMP	SAN JOAQUIN VALLEY APCD	CA	95231-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93721-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93706-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93725-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93725-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93725-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93722-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93745-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93745-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93727-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93725-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93725-
FRESNO	SAN JOAQUIN VALLEY APCD	CA	93727-
FULLERTON	SOUTH COAST AQMD	CA	92831-
GARDEN GROVE	SOUTH COAST AQMD	CA	92841-
Gardena	SOUTH COAST AQMD	CA	90248-
GARDENA	SOUTH COAST AQMD	CA	90248-
GEYSERVILLE	NORTHERN SONOMA COUNTY APCD	CA	95441-
GILROY	BAY AREA AQMD	CA	95020-
GOLETA	SANTA BARBARA COUNTY APCD	CA	93117-
GOLETA	SANTA BARBARA COUNTY APCD	CA	93117-
GRIMES	COLUSA COUNTY APCD	CA	95950-
HANFORD	SAN JOAQUIN VALLEY APCD	CA	93230-
HANFORD	SAN JOAQUIN VALLEY APCD	CA	93230-
HANFORD	SAN JOAQUIN VALLEY APCD	CA	93230-
Hawthorne	SOUTH COAST AQMD	CA	90250-
HAYWARD	BAY AREA AQMD	CA	94544-
HAYWARD	BAY AREA AQMD	CA	94545-
HAYWARD	BAY AREA AQMD	CA	94545-
HAYWARD	BAY AREA AQMD	CA	94545-
HAYWARD	BAY AREA AQMD	CA	94545-
HAYWARD	BAY AREA AQMD	CA	94545-
HAYWARD	BAY AREA AQMD	CA	94544-
HAYWARD	BAY AREA AQMD	CA	94544-
HAYWARD	BAY AREA AQMD	CA	94544-
HAYWARD	BAY AREA AQMD	CA	94544-
HAYWARD	BAY AREA AQMD	CA	94545-
HELM	SAN JOAQUIN VALLEY APCD	CA	93627-
HERCULES	BAY AREA AQMD	CA	94547-
HERCULES	BAY AREA AQMD	CA	94547-
HOLLISTER	MONTEREY BAY UNIFIED APCD	CA	95023-
HOLLISTER	MONTEREY BAY UNIFIED APCD	CA	95023-
HUNTINGTON BEACH	SOUTH COAST AQMD	CA	92649-
HUNTINGTON BEACH	SOUTH COAST AQMD	CA	92647-6252

37.501580	-121.964760
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37.550520	-122.066660
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36.841000	-119.790300
36.735170	-119.943350
36.699160	-119.745430
36.696340	-119.745480
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37.615800	-122.056400
37.651200	-122.128640
37.649550	-122.134900
37.652450	-122.122250
37.646130	-122.127390
37.630800	-122.124600
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SFPP, L.P. IMPERIAL TERMINAL
KINDER MORGAN IMPERIAL TERMINAL
TEVA PARENTERAL MEDICINES, INC
NEXGEN PHARMA INC
ALLERGAN INC
B BRAUN MEDICAL, INC
ANCHEN PHARMACEUTICALS, INC
HELENA INDUSTRIES, INC. / HELENA CHEMICAL COMPANY
HELENA INDUSTRIES, INC. / HELENA CHEMICAL COMPANY
CLARIANT CORPORATION
TCR Industries, Inc.
J R SIMPLOT COMPANY
J R SIMPLOT COMPANY
HARVEST POWER CALIFORNIA LLC
HYPONEX CORPORATION-CALIFORNIA
RANDY NIX CUSTOM WELDING
G S COSMECEUTICAL USA, INC
FERROTEC (USA) CORP - TEMESCAL DIVISION
FOSTER POULTRY FARMS-KOPRO
KOPRO PROCESSING FACILITY
SIMPLOT SOILBUILDERS
TESORO LOGISTICS MARINE TERMINAL 2
PETRO DIAMOND TERMINAL CO
RECOATING WEST
Ellis Paint Company
AIR PROD & CHEM INC
AIR PROD & CHEM INC
Spraylat Corporation - Los Angeles
AMVAC CHEMICAL CORP
BAXTER HEALTHCARE CORP., HYLAND DIV
DUNN-EDWARDS CORP
ENGINEERED POLYMER SOLUTIONS INC
GRIFOLS BIOLOGICALS INC
SMILAND PAINT COMPANY
MERLE NORMAN COSMETICS INC
LIBERTY COMPOSTING INC
JOHN BEAN TECHNOLOGIES CORPORATION
HMC
PACIFIC ETHANOL MADERA LLC
WILBUR-ELLIS COMPANY - MANTECA
FORWARD, INC. COMPOSTING FACILITY
PLAINS MARKETING, LP
SHELL CHEMICAL LP
ECO SERVICES OPERATIONS CORP (FORMERLY RHODIA INC)
Air Prods Mfg Corp Martinez Waterfront Rd
TESORO REFINING & MARKETING COMPANY
PLAINS PRODUCTS TERMINALS LLC

345 W ATEN ROAD
345 W ATEN ROAD
11-25 HUGHES AVE
17802 GILLETTE AVE
18600 VON KARMAN & 2525 DUPONT
2525 MCGAW AVE
72 FAIRBANKS
1075 S VINELAND AVE
1075 S VINELAND AVE
SECTION 2, TOWNSHIP 29S, RANGE 21E
26 Centerpointe Dr. #120
16777 HOWLAND RD
16777 HOWLAND RD
916 FREWERT RD
23390 E FLOOD RD
22700 ROAD 196
131 PULLMAN STREET
4569C LAS POSITAS RD
12997 W HWY 140
12997 W. HIGHWAY 140
2929 W HARNEY LN
1300 PIER B STREET
1920 LUGGER WAY
6200 ANGELO CT
3150 EAST PICO BOULEVARD
3305 E 26TH ST
3305 E 26TH ST
3465 S. La Ciencega Blvd
4100 E WASHINGTON BLVD
4501 COLORADO BLVD
4885- 4979 E 52ND PL
5501 E SLAUSON AVE
5555 VALLEY BLVD
620 LAMAR STREET
9130 BELLANCA AVE
12421 HOLLOWAY RD
2300 INDUSTRIAL AVE
300 COMMERCE DR
31470 AVENUE 12
13771 S PRESCOTT RD
9999 S AUSTIN RD
PENTLAND PUMP STATION
10 MOCOCO ROAD
100 MOCOCO RD
110 Waterfront Rd.
150 SOLANO WAY, AVON REFINERY
2801 WATERFRONT ROAD

IMPERIAL	IMPERIAL COUNTY APCD	CA	92243-
IMPERIAL	IMPERIAL COUNTY APCD	CA	92251-
IRVINE	SOUTH COAST AQMD	CA	92618-
IRVINE	SOUTH COAST AQMD	CA	92614-
IRVINE	SOUTH COAST AQMD	CA	92612-
IRVINE	SOUTH COAST AQMD	CA	92614-
IRVINE	SOUTH COAST AQMD	CA	92618-
KERMAN	SAN JOAQUIN VALLEY APCD	CA	93630-
KERMAN	SAN JOAQUIN VALLEY APCD	CA	93630-
KERN COUNTY	EASTERN KERN COUNTY APCD	CA	93251-
La Palma	SOUTH COAST AQMD	CA	90623-
LATHROP	SAN JOAQUIN VALLEY APCD	CA	95330-
LATHROP	SAN JOAQUIN VALLEY APCD	CA	95330-
LATHROP	SAN JOAQUIN VALLEY APCD	CA	95330-
LINDEN	SAN JOAQUIN VALLEY APCD	CA	95236-
LINDSAY	SAN JOAQUIN VALLEY APCD	CA	93247-
LIVERMORE	BAY AREA AQMD	CA	94551-
LIVERMORE	BAY AREA AQMD	CA	94551-
LIVINGSTON	SAN JOAQUIN VALLEY APCD	CA	95334-
LIVINGSTON	SAN JOAQUIN VALLEY APCD	CA	95334-
LODI	SAN JOAQUIN VALLEY APCD	CA	95242-
LONG BEACH	SOUTH COAST AQMD	CA	90813-2705
LONG BEACH	SOUTH COAST AQMD	CA	90813-
LOOMIS	PLACER COUNTY APCD	CA	95650-
Los Angeles	SOUTH COAST AQMD	CA	90023-
LOS ANGELES	SOUTH COAST AQMD	CA	90058-
LOS ANGELES	SOUTH COAST AQMD	CA	90058-
Los Angeles	SOUTH COAST AQMD	CA	90016-
LOS ANGELES	SOUTH COAST AQMD	CA	90023-
LOS ANGELES	SOUTH COAST AQMD	CA	90039-
LOS ANGELES	SOUTH COAST AQMD	CA	90058-
LOS ANGELES	SOUTH COAST AQMD	CA	90040-
LOS ANGELES	SOUTH COAST AQMD	CA	90032-
LOS ANGELES	SOUTH COAST AQMD	CA	90031-
LOS ANGELES	SOUTH COAST AQMD	CA	90045-
LOST HILLS	SAN JOAQUIN VALLEY APCD	CA	93249-
MADERA	SAN JOAQUIN VALLEY APCD	CA	93639-
MADERA	SAN JOAQUIN VALLEY APCD	CA	93637-
MADERA	SAN JOAQUIN VALLEY APCD	CA	93637-
MANTECA	SAN JOAQUIN VALLEY APCD	CA	95336-
MANTECA	SAN JOAQUIN VALLEY APCD	CA	95336-
MARICOPA	SAN JOAQUIN VALLEY APCD	CA	93252-
MARTINEZ	BAY AREA AQMD	CA	94553-
MARTINEZ	BAY AREA AQMD	CA	94553-
Martinez	BAY AREA AQMD	CA	94553-
MARTINEZ	BAY AREA AQMD	CA	94553-
MARTINEZ	BAY AREA AQMD	CA	94553-

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36.959950	-120.056170
36.949620	-120.087400
36.923130	-119.976070
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SHELL OIL PRODUCTS US, MARTINEZ REF.
AIR PRODUCTS & CHEMICALS, INC
AGRISOURCE
PHILLIPS 66 PIPELINE LLC
GERON CORPORATION
ELLEX ISCIENCE INC
HIGHWAY 59 COMPOSTING FACILITY
LIFESCAN, INC
BFI NEWBY ISLAND RECYCLER
NANOGRAM CORPORATION
NANOSYS INCS
CUSTOM MARBLE & ONYX
FABRICATED EXTRUSION COMPANY
STANISLAUS FARM SUPPLY
PRC-DESOTO INTERNATIONAL INC
NIKLOR CHEMICAL
CA PORTLAND CEMENT CO
3M COMPANY
DOW-ELCO INC
ENGINEERED POLYMER SOLUTIONS INC D/B/A VALSPAR COATINGS (not formerly Lilly Industries (USA), Inc.)
FLUID INK TECHNOLOGY
AHK ELECTRONIC SHEET METAL, INC
ALEXZA PHARMACEUTICALS
MEDIMMUNE
MEDIMMUNE
MINIMATICS INC
HITACHI CHEMICAL DIAGNOSTICS, INC
HELENA CHEMICAL COMPANY
OATEY COMPANY
MATHESON TRI-GAS, INC
REVANCE THERAPEUTICS INC
SIMTEC INC.
3M DRUG DELIVERY SYSTEMS
BIOMARIN PHARMACEUTICAL INC
BIO MARIN PHARMACEUTICAL INC
BIOMARIN PHARMACEUTICAL INC
BIOMARIN PHARMACEUTICAL INC
AN-FO MANUFACTURING COMPANY
COSCHEM, INC
BLUE SKY BIOFUELS, LLC
TRICOR REFINING, LLC
PRAXAIR INC
BASF CORPORATION
AKZO NOBEL COATINGS INC
DIVERSIFIED PRODUCTS MANUFACTURING, INC.
C.I COMPOSITES
COLOR-TEC INDUSTRIAL FINISHING, INC.

3485 PACHECO BLVD
Facility #A0295, Golden Eagle Refinery, 150 Solano Way
5701 MAXWELL-COLUSA RAOD
6601 FRANCO WESTERN RD
200 CONSTITUTION DRIVE
4055 CAMPBELL AVENUE
7040 N HIGHWAY 59
1000 GIBRALTAR DRIVE
1601 DIXON LANDING RD
165 TOPAZ STREET
233 S HILLVIEW DR
201 WINMOORE AVE
2331 HOOVER DR
624 E SERVICE RD
11601 UNITED STREET
1667 PURDY AVENUE
OAK CREEK RD 3 MI W MOJAVE
1601 SHAMROCK
1313 W OLYMPIC BLVD
901 West Union Street
5360 NORTH COMMERCE AVE.
875 JARVIS DR, SUITE 120
2091 STIERLIN COURT
297 N BERNARDO AVENUE
319 N BERNARDO AVENUE
433 CLYDE AVENUE
630 CLYDE COURT
1566 NELSON ROAD
6600 SMITH AVENUE
6775 CENTRAL AVE
7555 GATEWAY BLVD
2088 2ND ST
19901 NORDHOFF ST
21 PIMENTEL COURT
300 BEL MARIN KEYS BLVD
46 GALLI DRIVE
79 DIGITAL DRIVE
3129 ELMWOOD AVENUE
8108 CAPWELL DRIVE
851 49TH AVENUE
1134 MANOR ST
5705 AIRPORT DR
210 E MEATS AVE
434 W MEATS AVE
5523 BAGGETT MARYSVILLE ROAD
1114 EAST FIFTH STREET
11231 ILEX AVE

MARTINEZ	BAY AREA AQMD	CA	94553-
MARTINEZ	BAY AREA AQMD	CA	94553-
MAXWELL	COLUSA COUNTY APCD	CA	95955-
MCKITTRICK	SAN JOAQUIN VALLEY APCD	CA	93251-
MENLO PARK	BAY AREA AQMD	CA	94025-
MENLO PARK	BAY AREA AQMD	CA	94025-
MERCED	SAN JOAQUIN VALLEY APCD	CA	95348-
MILPITAS	BAY AREA AQMD	CA	95035-
MILPITAS	BAY AREA AQMD	CA	95035-
MILPITAS	BAY AREA AQMD	CA	95035-
MILPITAS	BAY AREA AQMD	CA	95035-
MODESTO	SAN JOAQUIN VALLEY APCD	CA	95358-
MODESTO	SAN JOAQUIN VALLEY APCD	CA	95354-
MODESTO	SAN JOAQUIN VALLEY APCD	CA	95351-
MOJAVE	EASTERN KERN COUNTY APCD	CA	93501-
MOJAVE	EASTERN KERN COUNTY APCD	CA	93501-
MOJAVE	EASTERN KERN COUNTY APCD	CA	93501-
MONROVIA	SOUTH COAST AQMD	CA	91016-
MONTEBELLO	SOUTH COAST AQMD	CA	90640-
Montebello	SOUTH COAST AQMD	CA	90640-
MOORPARK	VENTURA COUNTY APCD	CA	93021-
MORGAN HILL	BAY AREA AQMD	CA	95037-
MOUNTAIN VIEW	BAY AREA AQMD	CA	94043-
MOUNTAIN VIEW	BAY AREA AQMD	CA	94043-
MOUNTAIN VIEW	BAY AREA AQMD	CA	94043-
MOUNTAIN VIEW	BAY AREA AQMD	CA	94043-
MOUNTAIN VIEW	BAY AREA AQMD	CA	94043-
NELSON	BUTTE COUNTY AQMD	CA	95958-
NEWARK	BAY AREA AQMD	CA	94560-
NEWARK	BAY AREA AQMD	CA	94560-
NEWARK	BAY AREA AQMD	CA	94560-
NORCO	SOUTH COAST AQMD	CA	92860-
NORTHRIDGE	SOUTH COAST AQMD	CA	91324-
NOVATO	BAY AREA AQMD	CA	94949-
NOVATO	BAY AREA AQMD	CA	94949-
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NOVATO	BAY AREA AQMD	CA	94949-
OAKLAND	BAY AREA AQMD	CA	94601-
OAKLAND	BAY AREA AQMD	CA	94621-
OAKLAND	BAY AREA AQMD	CA	94601-
Bakersfield	SAN JOAQUIN VALLEY APCD	CA	93388-
ONTARIO	SOUTH COAST AQMD	CA	91761-
ORANGE	SOUTH COAST AQMD	CA	92865-
ORANGE	SOUTH COAST AQMD	CA	92865-
OROVILLE	BUTTE COUNTY AQMD	CA	95965-
OXNARD	VENTURA COUNTY APCD	CA	93030-
PACOIMA	SOUTH COAST AQMD	CA	91331-

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0379	110000474317	325611	1193011	
0380	110001193725	325991	1169411	
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STANFORD UNIVERSITY - SOM
ROMIC ENVIRONMENTAL TECHNOLOGI ES CORP
PARAMOUNT PETR CORP
LUBRIZOL ADVANCED MATERIALS, INC
AOC, LLC
PRAXAIR DISTRIBUTION INC
GENERAL CHEMICAL WEST, LLC
DOW CHEMICAL COMPANY
K2 PURE SOLUTIONS NOCAL, LP
GENERON IGS, INC
CAMERON
GFP ETHANOL LLC DBA CALGREN RENEWABLE FUELS
THERMO FISHER SCIENTIFIC
AMPAC FINE CHEMICAL
PARALLEL PRODUCTS
ARLON, MATERIALS FOR ELECTRONICS DIV
LMC ENTERPRISES, DBA FLO-KEM
FIBER ENTERPRISES
LEHIGH SOUTHWEST-REDDING
THE STRIP JOINT INC
AP PHARMA
CHEMCO SYSTEMS INC
GENENTECH INC
ONCOMED PHARMACEUTICALS
DURA TECHNOLOGIES, INC.
CONOCOPHILLIPS RICHMOND TERMINAL
EAST BAY BATCH
BIO-RAD LABORATORIES
UC BERKELEY
PLAINS PRODUCTS TERMINALS LLC
SANGAMO BIOSCIENCES
SMITH & COMPANY
LINDE LLC RICHMOND CA / Airgas Dry Ice
LINDE LLC RICHMOND CA / Airgas Dry Ice
GREEN PRODUCTS COMPANY
CHEVRON PRODUCTS COMPANY
Devoe Coatings Company
SAK CONSTRUCTION LLC
AIR LIQUIDE LARGE INDUSTRIES US LP
PHILLIPS 66 COMPANY - SAN FRANCISCO REFINERY
H.B.FULLER COMPANY
AIR PRODUCTS MFG CORP
VALSPAR COATINGS
LOPEZ AGRICULTURAL SERVICES
PROCTER & GAMBLE
KELLY-MOORE PAINT CO, INC
NOVARTIS PHARMACEUTICALS CORPORATION

1501 CALIFORNIA AVE
2081 BAY ROAD
14700-08 DOWNEY AVE
3115 PROPELLER DR
19991 SEATON AVE
1930 LOVERIDGE ROAD
501 NICHOLS ROAD
901 LOVERIDGE RD
950 LOVERIDGE ROAD
END OF ARCY LANE
LOVERIDGE ROAD
11813 ROAD 120 (NEI) / 11704 RD 120 (EnvF)
6065 SUNOL BOULEVARD
AEROJET ROAD & HWY 50
12281 ARROW ROUTE
9433 HYSSOP DR
19400-02 SUSANA RD
1450 VISTA WAY
15390 WONDERLAND BLVD
136 N CATALINA AVE
123 SAGINAW DRIVE
2800 BAY ROAD
550 BROADWAY STREET
800 CHESAPEAKE DRIVE
2720 S WILLOW AVE UNIT A
1300 CANAL BOULEVARD
200 SO 1ST STREET
2500 ATLAS ROAD
3300 REGATTA BLVD
488 WRIGHT AVENUE
501 CANAL BLVD, SUITE A100
5100 CHANNEL AVENUE
731 W. Cutting Blvd.
731 W. Cutting Blvd.
810 MARKET AVENUE
841 CHEVRON WAY
2625 Durahart Street
4253 DULUTH AVE
1380 SAN PABLO AVE
1380 SAN PABLO AVE
10500 INDUSTRIAL AVENUE
5025 83RD ST
5060 83RD STREET
5900 88TH ST
8201 FRUITRIDGE RD
1015 COMMERCIAL STREET
150 INDUSTRIAL ROAD

PALO ALTO	BAY AREA AQMD	CA	94304-
PALO ALTO	BAY AREA AQMD	CA	94303-
PARAMOUNT	SOUTH COAST AQMD	CA	90723-
PASO ROBLES	SAN LUIS OBISPO COUNTY APCD	CA	93446-
PERRIS	SOUTH COAST AQMD	CA	92570-
PITTSBURG	BAY AREA AQMD	CA	94565-
PITTSBURG	BAY AREA AQMD	CA	94565-
PITTSBURG	BAY AREA AQMD	CA	94565-
PITTSBURG	BAY AREA AQMD	CA	94565-
PITTSBURG	BAY AREA AQMD	CA	94565-
PITTSBURG	BAY AREA AQMD	CA	94565-
PIXLEY	SAN JOAQUIN VALLEY APCD	CA	93256-
PLEASANTON	BAY AREA AQMD	CA	94566-
RANCHO CORDOVA	SACRAMENTO METROPOLITAN AQMD	CA	95741-
RANCHO CUCAMONGA	SOUTH COAST AQMD	CA	91739-
RANCHO CUCAMONGA	SOUTH COAST AQMD	CA	91730-
RANCHO DOMINGUEZ	SOUTH COAST AQMD	CA	90221-
RED BLUFF	TEHAMA COUNTY APCD	CA	96080-
REDDING	SHASTA COUNTY AQMD	CA	96003-
REDONDO BEACH	SOUTH COAST AQMD	CA	90277-
REDWOOD CITY	BAY AREA AQMD	CA	94063-
REDWOOD CITY	BAY AREA AQMD	CA	94063-
REDWOOD CITY	BAY AREA AQMD	CA	94063-
REDWOOD CITY	BAY AREA AQMD	CA	94063-
RIALTO	SOUTH COAST AQMD	CA	92376-
RICHMOND	BAY AREA AQMD	CA	94804-
RICHMOND	BAY AREA AQMD	CA	94804-
RICHMOND	BAY AREA AQMD	CA	94806-
RICHMOND	BAY AREA AQMD	CA	94804-
RICHMOND	BAY AREA AQMD	CA	94804-
RICHMOND	BAY AREA AQMD	CA	94804-
RICHMOND	BAY AREA AQMD	CA	94804-
Richmond	BAY AREA AQMD	CA	94804-
Richmond	BAY AREA AQMD	CA	94804-
RICHMOND	BAY AREA AQMD	CA	94801-
RICHMOND	BAY AREA AQMD	CA	94802-
Riverside	SOUTH COAST AQMD	CA	92507-
ROCKLIN	PLACER COUNTY APCD	CA	95765-
RODEO	BAY AREA AQMD	CA	94572-
RODEO	BAY AREA AQMD	CA	94572-
ROSEVILLE	PLACER COUNTY APCD	CA	95678-
SACRAMENTO	SACRAMENTO METROPOLITAN AQMD	CA	95826-
SACRAMENTO	SACRAMENTO METROPOLITAN AQMD	CA	95826-
SACRAMENTO	SACRAMENTO METROPOLITAN AQMD	CA	95830-
SACRAMENTO	SACRAMENTO METROPOLITAN AQMD	CA	95826-
SAN CARLOS	BAY AREA AQMD	CA	94070-
SAN CARLOS	BAY AREA AQMD	CA	94070-

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0413	110000478885	325510	2461811	
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0454	110008288566	325412	14280011	
0455	110064273511	325412	14179111	

NUGEN TECHNOLOGIES, INC
POINT BIOMEDICAL
CP KELCO US INC
JOHNSON & JOHNSON PHARMACEUTICAL R&D LLC
FRAZEE INDUSTRIES
PHARMAVITE LLC
MASTERPICE ARTIST CANVAS
R J MCGLENNON CO, INC
FIBROGEN
NEKTAR THERAPEUTICS
SHERWIN WILLIAMS
SFPP, LP
HGST, A WESTERN DIGITAL COMPANY
Hill Bros Chemical Co
AMERICAN CUSTOM MARBLE, INC
CARDINAL INDUSTRIAL FINISHES
SUN CHEMICAL CORPORATION
TRIANGLE COATINGS, INC
PROMEGA BIOSCIENCES
VOPAK TERMINAL LONG BEACH INC,A DELAWARE
BIOMARIN PHARMACEUTICAL INC
ODYSSEY THERA, INC
BIOGENEX LABORATORIES, INC
BEHR PROCESS CORP
BP CHEMICALS HITCO INC MATERIALS FOCUSED FACTORY
AIR PRODUCTS MANUFACTURING CORPORATION
VALUE PRODUCTS INC
GILBERT SPRAY COAT
MEDIMMUNE
PRECURSOR ENERGETICS,INC
Phibro-Tech Inc
RANDAL NUTRITIONAL PRODUCTS, INC
PCAS - NANOSYN, LLC
NEILMED PHARMACEUTICALS, INC
CASTLE OF MARBLE
THRESHOLD INTERPRISES
HYPONEX CORPORATION
PQ CORPORATION
D J SIMPSON COMPANY
AMGEN SF, LLC
FIVE-PRIME THERAPEUTICS
FIBROGEN INC
ARE-TECHNOLOGY CENTER SSF, LLC
DIADEXUS,INC
GENENTECH, INC
ALEXANDRIA REAL ESTATE EQUITIES, INC
GENENTECH, INC

201 INDUSTRIAL ROAD
894 INDUSTRIAL ROAD
2025 HARBOR DR E
3210 MERRYFIELD RW
6625 MIRAMAR RD
1150 AVIATION PL
1415 BANCROFT AVENUE
198 UTAH STREET
409 ILLINOIS STREET
455 MISSION BAY BLVD, SOUTH
1815 JUNCTION AVENUE
2150 KRUSE DRIVE
3403 YERBA BUENA RD
410 Charcot Ave.
806 W HOME STREET
890 COMMERCIAL STREET
1599 FACTOR AVENUE
1930 FAIRWAY DRIVE
277 GRANADA DR
3601 DOCK ST
770 LINDARO STREET
4550 NORRIS CANYON RD, STE 140
4600 NORRIS CANYON RD, #200
3400 W GARRY AVE
700 E DYER RD
1515 NORMAN AVENUE
2775 SCOTT BOULEVARD
300 LAURELWOOD ROAD
3055 PATRICK HENRY DR
3221 SCOTT BOULEVARD
8851 Dice Rd
1595 HAMPTON WAY
3331B INDUSTRIAL DRIVE
601 AVIATION BOULEVARD
1607 LOS ANGELES AVE
21 JANIS WAY
742 INDUSTRIAL WAY
8401 QUARTZ AVE
111 SO MAPLE AVENUE
1150 VETERANS BOULEVARD
2 CORPORATE DRIVE
201 GATEWAY BOULEVARD
343 OYSTER POINT BOULEVARD
349 OYSTER POINT BOULEVARD
460 POINT SAN BRUNO BOULEVARD
600 GATEWAY BOULEVARD
611 GATEWAY BOULEVARD

SAN CARLOS	BAY AREA AQMD	CA	94070-
SAN CARLOS	BAY AREA AQMD	CA	94070-
SAN DIEGO	SAN DIEGO COUNTY APCD	CA	92113-
SAN DIEGO	SAN DIEGO COUNTY APCD	CA	92121-
SAN DIEGO	SAN DIEGO COUNTY APCD	CA	92121-
SAN FERNANDO	SOUTH COAST AQMD	CA	91340-
SAN FRANCISCO	BAY AREA AQMD	CA	94124-
SAN FRANCISCO	BAY AREA AQMD	CA	94103-
SAN FRANCISCO	BAY AREA AQMD	CA	94158-
SAN FRANCISCO	BAY AREA AQMD	CA	94158-
SAN JOSE	BAY AREA AQMD	CA	95131-
SAN JOSE	BAY AREA AQMD	CA	95131-
SAN JOSE	BAY AREA AQMD	CA	95135-
San Jose	BAY AREA AQMD	CA	95131-
SAN JOSE	BAY AREA AQMD	CA	95126-
SAN JOSE	BAY AREA AQMD	CA	95112-
SAN LEANDRO	BAY AREA AQMD	CA	94577-
SAN LEANDRO	BAY AREA AQMD	CA	94577-
SAN LUIS OBISPO	SAN LUIS OBISPO COUNTY APCD	CA	93401-
SAN PEDRO	SOUTH COAST AQMD	CA	90731-
SAN RAFAEL	BAY AREA AQMD	CA	94901-
SAN RAMON	BAY AREA AQMD	CA	94583-
SAN RAMON	BAY AREA AQMD	CA	94583-
SANTA ANA	SOUTH COAST AQMD	CA	92704-
SANTA ANA	SOUTH COAST AQMD	CA	92705-
SANTA CLARA	BAY AREA AQMD	CA	95054-
SANTA CLARA	BAY AREA AQMD	CA	95050-
SANTA CLARA	BAY AREA AQMD	CA	95054-
SANTA CLARA	BAY AREA AQMD	CA	95054-
SANTA CLARA	BAY AREA AQMD	CA	95054-
Santa Fe Springs	SOUTH COAST AQMD	CA	90670-
SANTA ROSA	BAY AREA AQMD	CA	95407-
SANTA ROSA	BAY AREA AQMD	CA	95403-
SANTA ROSA	BAY AREA AQMD	CA	95403-
SATICOY	VENTURA COUNTY APCD	CA	93004-
SCOTTS VALLEY	MONTEREY BAY UNIFIED APCD	CA	95066-
SHAFTER	SAN JOAQUIN VALLEY APCD	CA	93263-
SOUTH GATE	SOUTH COAST AQMD	CA	90280-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-

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MACROGENICS WEST,INC
CROP PRODUCTION SERVICES INC
VALUE PRODUCTS INC
CONTRACT COATINGS
MARTIN OPERATING PARTNERSHIP LP
PACIFIC ETHANOL STOCKTON LLC
FOPPIANO RANCH
H.J. BAKER AND BROTHERS, INC.
MARBLE PALACE INC
AMERICAN BIODIESEL, INC DBA COMMUNITY FUELS
E B STONE & SON INC
PRISM INKS, INC
CEPHEID
TAFT MANUFACTURING COMPANY
SOUTH KERN INDUSTRIAL CENTER LLC
AMGEN INC.
SIERRA ENGINEERING
EXXONMOBIL OIL CORPORATION
Torrance Coatings and Resins Plant (formerly PPG Industries)
SURTEC, INC
JR SIMPLOT COMPANY
VITATECH INTL INC
STAR PACIFIC INC
AIR LIQUIDE AMERICA SPECIALTY GASES, LLC
GENENTECH, INC.
NOVARTIS
JEPSON PRAIRIE ORGANICS COMPOST FACILITY
ALZA CORPORATION, A SUBSIDIARY OF JOHNSON & JOHNSON
MATHESON TRIGAS
TRI-COUNTY FIBERGLASS
CALIFORNIA SOILS INC
RECOLOGY BLOSSOM VALLEY ORGANICS- NORTH
RECOLOGY GROVER ENVIRONMENTAL PRODUCTS
WOOD INDUSTRIES COMPANY
J&D LABORATORIES INC
SMITH & VANDIVER CORP
AGRIUM U.S. INC.
COLUSA COUNTY FARM SUPPLY, INC.
Air Liquide America L P
UNION OIL CO LOS ANG REFINERY
TESORO REFINING AND MARKETING CO, LLC
PRAXAIR INC
Valero Refining Co. - Wilmington (prev. Ultramar Inc.)
US BORAX INC
AIR PRODUCTS AND CHEMICALS, INC.
ULTRAMAR INC
AGRIFORM/INLAND TERMINAL, LLC

ONE CORPORATE DRIVE
1905 N BROADWAY
2128 INDUSTRIAL DR
2211 NAVY DR
2717 W WASHINGTON ST
3028 NAVY DR
500 N JACK TONE RD
65 STORK RD
711 S SAN JOAQUIN ST
809-C SNEDECKER AVE
6111 LAMBIE ROAD
828 AHWANEE AVENUE
918 CARIBBEAN DRIVE
19815 S LAKE RD
2653 SANTIAGO RD
ONE AMGEN CENTER DRIVE19-2-B
35111 LODGE RD
3700 W 190TH ST
465 Crenshaw Blvd
1880 N MACARTHUR DR
4295 AVENUE 228
2832 DOW AVE
1205 ATLANTIC STREET
700 DECOTO ROAD
1000 NEW HORIZONS WAY
2010 CESSNA DRIVE
6426 HAY ROAD
700 EUBANKS DRIVE
871 EUBANKS DRIVE
3510 ARUNDELL CIRCLE
3401 GAFFERY RD
3909 Gaffery Road
3909 W GAFFERY RD
7715 AVENUE 296
2710 PROGRESS ST
480 AIRPORT BLVD
3961 CHANNEL DRIVE
5873 FRESHWATER ROAD
1502 W. Anaheim St.
1660 W ANAHEIM ST
2101 E PACIFIC COAST HWY
2300 E PACIFIC COAST HWY
2402 E ANAHEIM ST
300 FALCON ST
700 N HENRY FORD AVE
961 LA PALOMA AVE
40189 COUNTY ROAD 18C

SOUTH SAN FRANCISCO	BAY AREA AQMD	CA	94080-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95205-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95206-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95206-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95203-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95206-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95215-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95203-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95203-
STOCKTON	SAN JOAQUIN VALLEY APCD	CA	95203-
SUISUN CITY	BAY AREA AQMD	CA	94585-
SUNNYVALE	BAY AREA AQMD	CA	94086-
SUNNYVALE	BAY AREA AQMD	CA	94089-
TAFT	SAN JOAQUIN VALLEY APCD	CA	93268-
TAFT	SAN JOAQUIN VALLEY APCD	CA	93268-
THOUSAND OAKS	VENTURA COUNTY APCD	CA	91320-
TOLLHOUSE	SAN JOAQUIN VALLEY APCD	CA	93667-
TORRANCE	SOUTH COAST AQMD	CA	90504-
Torrance	SOUTH COAST AQMD	CA	90503-
TRACY	SAN JOAQUIN VALLEY APCD	CA	95376-
TULARE	SAN JOAQUIN VALLEY APCD	CA	93274-
TUSTIN	SOUTH COAST AQMD	CA	92780-
UNION CITY	BAY AREA AQMD	CA	94587-
UNION CITY	BAY AREA AQMD	CA	94587-
VACAVILLE	YOLO/SOLANO AQMD	CA	95688-
VACAVILLE	YOLO/SOLANO AQMD	CA	95688-
VACAVILLE	YOLO/SOLANO AQMD	CA	95687-
VACAVILLE	YOLO/SOLANO AQMD	CA	95688-
VACAVILLE	YOLO/SOLANO AQMD	CA	95688-
VENTURA	VENTURA COUNTY APCD	CA	93003-
VERNALIS	SAN JOAQUIN VALLEY APCD	CA	95385-
Vernalis	SAN JOAQUIN VALLEY APCD	CA	95385-
VERNALIS	SAN JOAQUIN VALLEY APCD	CA	95385-
VISALIA	SAN JOAQUIN VALLEY APCD	CA	93291-
VISTA	SAN DIEGO COUNTY APCD	CA	92081-
WATSONVILLE	MONTEREY BAY UNIFIED APCD	CA	95076-
WEST SACRAMENTO	YOLO/SOLANO AQMD	CA	95691-
WILLIAMS	COLUSA COUNTY APCD	CA	95987-
Wilmington	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WILMINGTON	SOUTH COAST AQMD	CA	90744-
WOODLAND	YOLO/SOLANO AQMD	CA	95776-

37.656940	-122.401090
37.981500	-121.252800
37.912880	-121.244970
37.717580	-121.394450
37.946300	-121.334000
37.941300	-121.338500
37.977100	-121.148870
37.941660	-121.331080
37.946110	-121.285290
37.956070	-121.361600
38.220000	-121.862000
37.396570	-122.027940
37.413450	-121.995990
35.145000	-119.238500
35.132770	-119.245490
34.191870	-118.920650
36.966740	-119.320780
33.853000	-118.332000
33.842450	-118.328740
37.749300	-121.410230
36.202800	-119.477900
33.711670	-117.808090
37.601680	-122.034120
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38.389010	-121.949990
38.393620	-121.961370
38.314890	-121.830830
38.395460	-121.965930
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38.558900	-121.576360
39.174720	-122.223680
33.776390	-118.283600
33.776930	-118.288720
33.791710	-118.236320
33.790820	-118.229600
33.778300	-118.235100
33.756160	-118.265830
33.779010	-118.241430
33.759210	-118.266130
38.706220	-121.764810

0503	110063944647	325314	16880411	
0504	110000467343	325180	3946411	
0505	110002339611	325180	4265011	
0506	110001399585	325311	3513611	
0507	110040482634	325314	14781611	
0508	110022512805	325411	1454411	
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0510	110014375853	325412	12827011	
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0512	110000522694	325520	1082611	
0513	110000466558	325412	598411	
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0515	110045947393	325910	16169211	
0516	110041627521	325412	14785211	
0517	110032913024	324110	1099511	
0518	110000466683	325193	1619811	
0519	110000467520	325520	1009611	
0520	110041418221	325193	12820811	
0521	110001427769	325510	1593711	
0522	110000887942	325412	1610611	
0523	110000467192	325199	16168711	
0524	110017379601	325211	1411211	
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0526	110011681331	325612	1610911	
0527	110037582559	325180	12831711	
0528	110064530253	325314	17491111	
0529	110002437694	486210		NEICO0390026
0530	110064530244	325314	17491011	
0531	110017690934	325520	4448111	
0532	110040091129	325412	17481411	
0533	110054883060	325193	17466011	
0534	110040873711	325193	4257811	NEICO0590828
0535	110000600298	325998	3659711	
0536	110046315590	325212	896211	
0537	110001399479	325211	3587711	
0538	110023151088	325180	12869011	
0539	110064534507	211111		
0540	110010751230	325998	992811	
0541	110012141798	325180	12868111	
0542	110064524019	325314	17491211	
0543	110064531653	325998	17493511	
0544	110022524133	325412	13034311	
0545	110002446835	325180	1148711	
0546	110001746479	325412	1148311	

NORTHERN RECYCLING COMPOST
HONEYWELL, INC.
GREAT WESTERN INORGANICS, INC
PERMAGREEN PRODUCTS
WESTERN DISPOSAL
HOSPIRA BOULDER, INC
AMGEN BOULDER INC
AGILENT TECHNOLOGIES US, INC.
AGILENT TECHNOLOGIES US, INC.
AGILENT TECHNOLOGIES US, INC.
AGILENT TECHNOLOGIES US, INC.
CORDEN PHARMA COLORADO, INC.
BASF CORPORATION
SANDOZ
MANSTONE
CHROMATIC TECHNOLOGIES
NEXGEN PHARMA
SUNCOR ENERGY - DENVER REFINERY
BIRKO CORP
SASHCO, INC
MAVERICK BIOFUELS, INC. - M2 FACILITY
OLD WESTERN PAINT CO INC
UPSHER-SMITH LABORATORIES
COLORADO SALT PRODUCTS, LLC
BACKER ROD MFG.
COLORADO PAINT CO
SCOTTS LIQUID GOLD INC
Chemtrade Solutions LLC-Denver
A1 ORGANICS - EATON ORGANIC RECYCLING
PHILLIPS PIPE LINE CO KIOWA PUMP STATN
SELECT MATERIALS - TV DAIRY
MURCO WALL PRODUCTS
TOLMAR, INC. - CENTRE
U.S. DEPT OF ENERGY - NREL BIO-REFINERY
MMI ETOH INC
MINOVA USA INC.
CRAY VALLEY USA, LLC - GRAND JUNCTION
REYNOLDS POLYMER TECHNOLOGY INC
FLORIDA CIRTECH INC.
EOG RESOURCES - GARDEN CREEK 6-11H
VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
CHEMICAL & METAL INDUSTRIES, INC.
A1 ORGANICS- RATTLER RIDGE ORG RECYCLING
NALCO COMPANY-GREELEY FACILITY
GE HEALTHCARE DHARMACON, INC.
MATHESON TRI-GAS, INC. (WAS 013/0347)
AMGEN, INC. - LONGMONT

11220 COUNTY ROAD 94
6945 INDIANA CT STE 100
17400 HIGHWAY 72
5520 HARLAN ST
2655 63RD ST
4890 STERLING DR
5550 AIRPORT RD
5555 AIRPORT BLVD
5555 AIRPORT BLVD
5555 AIRPORT BLVD
5555 AIRPORT BLVD
2075 N 55TH ST
10601 FULTON ST
2555 W MIDWAY BLVD
105 TALAMINE CT
1096 ELKTON DR
1835 E CHEYENNE RD
5801 BRIGHTON BLVD
9152 YOSEMITE ST
10300 E 107TH PL
6535 WASHINGTON ST
2001 W BARBERRY PL
301 S CHEROKEE ST
3900 JOLIET ST
4244 BROADWAY
4747 HOLLY ST
4880 HAVANA ST
5075 E. 50TH AVE
16350 COUNTY ROAD 76
7041 COUNTY RD 158
7678 WCR 17
310 S UNION ST
701 CENTRE AVENUE
16173 DENVER WEST PKWY
COORS BREWERY VALLEY COMPLEX
2306 HIGHWAY 6 AND 50
569 24 1/4 RD
607 HOLLINGSWORTH AVE
1309 N 17TH AVE
SESE SEC 11 T11N R62W
9131 E 96TH AVE
23465 CHEMTECH AVE
12002 WELD COUNTY ROAD 59
26956 W CR 47
2650 CRESCENT DR, SUITE 100
1861 LEFTHAND CIR
4000 NELSON RD

ZAMORA	YOLO/SOLANO AQMD	CA	95698-
ARVADA	Jefferson County	CO	80007-0101
ARVADA AREA	Jefferson County	CO	80007-
ARVADA AREA	Jefferson County	CO	80002-
BOULDER	Boulder County	CO	80301-
BOULDER	Boulder County	CO	80301-2350
BOULDER	Boulder County	CO	80301-
BOULDER	Boulder County	CO	80301-
BOULDER	Boulder County	CO	80301-
BOULDER	Boulder County	CO	80301-
BOULDER	Boulder County	CO	80301-
BOULDER	Boulder County	CO	80301-
Brighton	Adams County	CO	80601-7135
BROOMFIELD	Broomfield County	CO	80020-1632
COLORADO SPRINGS	El Paso County	CO	80907-
COLORADO SPRINGS	El Paso County	CO	80907-3575
COLORADO SPRINGS	El Paso County	CO	80905-2868
COMMERCE CITY	Adams County	CO	80022-
COMMERCE CITY	Adams County	CO	80640-
COMMERCE CITY AREA	Adams County	CO	80601-7176
COMMERCE CITY AREA	Adams County	CO	80229-7012
DENVER	Denver County	CO	80204-3813
DENVER	Denver County	CO	80223-2114
DENVER	Denver County	CO	80239-3231
DENVER	Denver County	CO	80216-4902
DENVER	Denver County	CO	80216-6409
DENVER	Denver County	CO	80239-2400
DENVER	Denver County	CO	80216-3140
EATON AREA	Weld County	CO	80615-
ELBERT		CO	80106-
FIRESTONE AREA	Weld County	CO	80621-
FLORENCE	Fremont County	CO	81226-1707
FORT COLLINS	Larimer County	CO	80526-
GOLDEN AREA	Jefferson County	CO	80401-
GOLDEN, 0.8 MI NE OF	Jefferson County	CO	80401-
GRAND JUNCTION	Mesa County	CO	81505-1306
GRAND JUNCTION	Mesa County	CO	81505-
GRAND JUNCTION	Mesa County	CO	81505-1017
GREELEY	Weld County	CO	80631-9562
GROVER 4.4 MI. NW OF		CO	
HENDERSON	Adams County	CO	80640-8426
HUDSON AREA	Weld County	CO	80642-7805
KEENESBURG 4.5 MI. N OF	Weld County	CO	80643-
KERSEY	Weld County	CO	80631-
LAFAYETTE	Boulder County	CO	80026-
LONGMONT	Boulder County	CO	80501-
LONGMONT	Boulder County	CO	80503-

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40.020250	-105.227461
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0550	110041460077	211111		
0551	110023148084	211111	12863911	
0552	110000528251	325312	4247111	
0553	110038638463	325199	17487411	
0554	110023145318	211111	13073011	
0555	110054884773	211112		
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0557	110043786356	325180	899011	
0558	110021034860	325193	12854411	
0559	110000525904	325120	12846311	
0560	110064520308	325412	17491611	
0561	110024579204	325193	12870111	
0562	110031306272	325992	12872211	
0563	110031262498	325193	12876811	
0564	110000315864	325211	15588411	
0565	110000315891	325411	921211	
0566	110056402771	325211	15588511	
0567	110016683490	325411		
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0574	110000316701	325	589611	
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0578	110000317498	325510		
0579	110010573753	325211		
0580	110001409841	325120	17125511	
0581	110000338518	325998	2439111	
0582	110002506137	32512	899111	
0583	110001148598	32411	588311	
0584	110007354246	32512	2439911	
0585	110000338554	325194		
0586	110015634660	32518	12735711	
0587	110000338536	325211	534011	
0588	110041551987	32518	2684211	
0589		325222		
0590	110000338983	3254	17123211	
0591	110000338581			
0592	110024550519	325222		
0593	110000338652	325613	588911	

COLORADO MATERIALS - MOUNTAIN VIEW FARM
AMERICAN PRIDE COOP - MEAD FERTILIZER
BOULDER SCIENTIFIC CO
ROCKIES EXPRESS PIPELINE LLC - MEEKER
ENTERPRISE GAS PROC - MEEKER GAS PLANT
POOLE CHEMICAL CO
ECODYNAMICS, INC.
OXY USA WTP LP - CONN CREEK GAS
HUNTER RIDGE ENERGY - STORY GULCH C.S.
BONAKEMI USA INC.
KMG ELECTRONIC CHEMICALS, INC
STERLING ETHANOL
PRAXAIR INC
TOLMAR INC. - WINDSOR FACILITY
FRONT RANGE ENERGY, LLC
CARESTREAM HEALTH, INC
YUMA ETHANOL, LLC
DOW CHEMICAL ALLYNS POINT
PFIZER GLOBAL MANUFACTURING
Styron LLC - Allyn's Point
Chemtura?/Chemical Company, Inc.
Uniroyal Chemical Company
NEW HAVEN TERMINAL - NEW HAVEN
MAGELLAN TERMINALS HOLDINGS,LP - WATERFRONT ST
R.T. Vanderbilt Company, Incorporated
POLYONE DESIGNED STRUCTURES & SOLUTIONS
Cray Valley USA, LLC
HAMPFORD RESEARCH, INC.
ALLNEX USA INC.
EVONIK CYRO LLC
Allnex USA, Inc formerly CYTEC INDUSTRIES INC
Keeler & Long Inc./PPG Industries
DOW REICHHOLD SPECIALTY LATEX LLC (CLOSED)
LINDE LLC
HONEYWELL INTERNATIONAL INC-CLAYMONT
SUNOCO LOGISTICS MARCUS HOOK INDUSTRIAL COMPLEX
DELAWARE CITY REFINERY - OLD DATA
AIR LIQUIDE INDUSTRIAL U.S. LP
METACHEM PRODUCTS, LLC (CLOSED)
DUPONT - RED LION PLANT
FORMOSA PLASTICS CORPORATION
KUEHNE CHEMICAL COMPANY INC
CHEMOURS EDGE MOOR
SPI PHARMA, INC.
MACDERMID AUTOTYPE, INC
INVISTA APPLIED RESEARCH CENTRE
CRODA INC.

6875 N COUNTY RD #9
360 3RD ST
598 COUNTY HWY 7
NWSW SEC 4 T2S R97W
SEC 18 & 19 T1S R97W
2060 SOUTH ROAD 5 EAST
5492 US HIGHWAY 160 E
SWSW SEC 32 T6S R97W
SEC 34 T4S R96W AND
3040 E 4TH ST
250 WILLIAM WHITE BLVD
NE SEC 28 T8N R52W
2451 JACKSON COUNTY RD 10
1201 CORNERSTONE DR
31375 Great Western Dr
2000 HOWARD SMITH AVE WEST
38480 COUNTY ROAD H
1761 RTE 12
445 EASTERN POINT RD
1761 RTE 12
280 Elm St
100 WATERFRONT ST
280 WATERFRONT ST
30 Winfield Street
69 SOUTHFIELD AVENUE
125 ONTARIO ST
54 VETERANS BLVD
528 SOUTH CHERRY STREET
528 SOUTH CHERRY STREET
S CHERRY & BALL STS
856 Echo Lake Road
144 FORK BRANCH ROAD
6000 Philadelphia Pike
6100 PHILADELPHIA PIKE
EAST RT. 13, NORTH CLAYMONT
2000/4550 WRANGLE HILL ROAD
4442 WRANGLE HILL ROAD
745 GOVERNOR LEA ROAD
766 GOVERNOR LEA ROAD
780 SCHOOL HOUSE ROAD
RIVER ROAD & RED LION CREEK
104 HAY RD
40 Cape Henlopen Drive
701 INDUSTRIAL DR.
150 RED MILL ROAD
315 CHERRY LANE

LOVELAND AREA	Larimer County	CO	80538-
MEAD	Weld County	CO	80542-
MEAD	Weld County	CO	80542-
MEEKER 21.1 MI. SW OF		CO	
MEEKER 21.1 MI. W OF	Rio Blanco County	CO	81650-
MONTE VISTA	Rio Grande County	CO	81144-9401
MONTE VISTA 4.5 MI. SE OF	Rio Grande County	CO	81144-
PARACHUTE 10.1 MI. W OF	Garfield County	CO	81630-
PARACHUTE 14.2 MI. N OF		CO	
PUEBLO	Pueblo County	CO	81001-4212
PUEBLO AREA	Pueblo County	CO	81001-
STERLING	Logan County	CO	80751-
WALDEN, 3.8 MI NE OF	Jackson County	CO	80480-
WINDSOR	Weld County	CO	80550-
WINDSOR	Weld County	CO	80550-
WINDSOR AREA	Weld County	CO	80550-
YUMA AREA	Yuma County	CO	80759-7856
Gales Ferry	New London County	CT	06335-
GROTON (HISTORICAL)	New London County	CT	06340-5157
LEDYARD	New London County	CT	06335-
Naugatuck	NEW HAVEN	CT	06770-
Naugatuck	NEW HAVEN	CT	06461-
NEW HAVEN	New Haven County	CT	06512-1713
NEW HAVEN	New Haven County	CT	06512-1717
Norwalk	FAIRFIELD	CT	06856-
STAMFORD	Fairfield County	CT	06902-7614
STRATFORD	Fairfield County	CT	06615-7135
STRATFORD	Fairfield County	CT	06615-5111
WALLINGFORD	New Haven County	CT	06492-
WALLINGFORD	New Haven County	CT	06492-
WALLINGFORD	New Haven County	CT	06492-
Watertown		CT	06795-
CHESWOLD		DE	
Claymont	New Castle County	DE	19703-
CLAYMONT	New Castle County	DE	19703-
CLAYMONT	New Castle County	DE	19703-
DELAWARE CITY	New Castle County	DE	19706-
DELAWARE CITY	New Castle County	DE	19706-
DELAWARE CITY	New Castle County	DE	
DELAWARE CITY	New Castle County	DE	19706-
DELAWARE CITY	New Castle County	DE	19706-
DELAWARE CITY	New Castle County	DE	19706-
EDGEMOOR		DE	19809-
Lewes	Sussex County	DE	19958-
Middletown		DE	19709-
New Castle	New Castle County	DE	19721-
NEW CASTLE	New Castle County	DE	19720-

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40.235970	-104.998890
40.238800	-104.998520
39.905578	-108.294369
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38.279160	-104.512470
40.637600	-103.190240
40.779480	-106.234930
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FMC BIOPOLYMER
AstraZeneca Pharmaceuticals, LLC-Newark
BASF COLOR & EFFECTS USA LLC - NEWPORT
GREEN TREE CHEMICAL TECHS INC - AEROSOLS DIV
INVISTA
PERDUE-AGRIRECYCLE LLC
DUPONT EDGE MOOR
MAGELLAN TERMINALS HOLDINGS, L.P.
NORAMCO INC
DU PONT CHRISTINA LAB
Ashland Chemical
MOSAIC FERTILIZER, LLC
BIOTEST PHARMACEUTICALS CORPORATION.
ASCEND PERFORMANCE MATERIALS OPERATIONS
ASCEND PERFORMANCE MATERIALS OPERATIONS
ILLINOIS TOOL WORKS, INC. / ITW POLYMERS ADHESIVES, NORTH AMERICA
GE AVIATION SYSTEMS LLC
TSE INDUSTRIES, INC.
BRANDFX, LLC
ST. MARKS POWDER, INC. A GENERAL DYNAMIC
MENLO ENERGY FLORIDA, LLC
SURECRETE DESIGN PRODUCTS
EPS Valspar (formerly Lilly Industries, Inc.)
ACTAVIS LABORATORIES, FL, INC.
STANDARD CARBON, LLC
Coronado Paint Company (Complementary Coatings Corporation (dba Insl-X))
COASTAL TERMINALS, LLC
SIVANCE, LLC
DELTA LABORATORIES INCORPORATED
METRA ELECTRONICS CORPORATION
Crowley American Transport McGiffen Dock
IFF Chemical Holdings Inc. (formerly Bush Boake Allen)
REICHHOLD LLC 2
RENESSENZ LLC
Jacksonville Port Authority Blount Island Marine
Growers Fertilizer Corp.
CLEAN FUEL LAKELAND, LLC/Purada Processing, LLC.
HEXION INC.
AOC, L.L.C.
ASSOCIATED PAINT, INC.
NOVEN PHARMACEUTICALS, INC.
AVEVA DRUG DELIVERY SYSTEMS, INC.
PRINCE MINERALS, LLC
MOSAIC FERTILIZER LLC
ARRMAZ PRODUCTS, L.P.
MOSAIC FERTILIZER LLC
ARGOS CEMENT, LLC

1301 OGLETOWN RD
587 Old Baltimore Pike
205 SOUTH JAMES STREET
105 PARK AVE.
25876 DUPONT RD
28338 ENVIRO WAY
104 HAY ROAD
1050 CHRISTINA AVENUE
500 OLD SWEDES LANDING ROAD
501 CHRISTINA AVE
2801 State Road 60 W
3200 Hwy 60 West
5800 Park of Commerce Blvd.,
3000 OLD CHEMSTRAND RD
3000 OLD CHEMSTRAND RD
11701 56th Court North
14200 ROOSEVELT BLVD
5260 113TH AVE N
605 Townsend Rd
7121 Coastal Highway
15000 Citrus Country Dr
15246 Citrus Country Drive
2355 SW 66th Terrace
4955 Orange Drive
551 North US Highway 41
308 Old County Road
PT EVERGLADES/2401 EISENHOWER
5002 NE 54th Place
640 West 18 Street
460 Walker St
1163 Talleyrand Avenue
2051 LANE AVENUE NORTH
54 WAMSLEY RD
601 CRESTWOOD ST
9620 Dave Rawls Boulevard
312 N Buena Vista Dr
1248 GEORGE JENKINS BLVD, J-4
2525 SOUTH COMBEE ROAD
4620 NORTH GALLOWAY ROAD
10160 NW South River Drive
11960 SW 144th STREET
3250 COMMERCE PARKWAY
710 SOUTH ROSSITER STREET
3095 HIGHWAY 640 W
4800 STATE ROAD 60 EAST
7450 HIGHWAY 630
CR 235, 2.5 MILES NE OF CITY

NEWARK	New Castle County	DE	19711-
Newark	New Castle County	DE	19702-
NEWPORT	New Castle County	DE	19804-
SEAFORD	Sussex County	DE	19973-
SEAFORD	Sussex County	DE	19973-
SEAFORD	Sussex County	DE	19973-
WILMINGTON	New Castle County	DE	19809-
WILMINGTON	New Castle County	DE	19801-
WILMINGTON	New Castle County	DE	19801-
WILMINGTON	New Castle County	DE	19801-
Bartow	Polk County	FL	33830-9003
BARTOW	Polk County	FL	33830-
BOCA RATON	Palm Beach County	FL	33487-
CANTONMENT	Escambia County	FL	32533-
CANTONMENT	Escambia County	FL	32533-
CLEARWATER	Pinellas County	FL	33760-
CLEARWATER	Pinellas County	FL	33762-
CLEARWATER	Pinellas County	FL	33760-4838
COCOA	Brevard County	FL	32926-3321
CRAWFORDVILLE	Wakulla County	FL	32355-0222
DADE CITY	Pasco County	FL	33523-6014
DADE CITY	Pasco County	FL	33523-
Davie	Broward County	FL	33317-
DAVIE	Broward County	FL	33314-
DUNNELLON	Marion County	FL	34432-
Edgewater		FL	32132-
FORT LAUDERDALE	Broward County	FL	33316-
GAINESVILLE	Alachua County	FL	32609-1679
HIALEAH	Miami-Dade County	FL	33010-
HOLLY HILL	Volusia County	FL	32117-2653
JACKSONVILLE	Duval County	FL	32206-
Jacksonville	Duval County	FL	32254-1529
JACKSONVILLE	Duval County	FL	32254-2847
JACKSONVILLE	Duval County	FL	32208-4476
JACKSONVILLE	Duval County	FL	32226-
Lake Alfred	Polk County	FL	33850-
LAKELAND	Polk County	FL	33815-
LAKELAND	Polk County	FL	33801-
LAKELAND	Polk County	FL	33810-6717
MEDLEY	Miami-Dade County	FL	33178-
MIAMI	Miami-Dade County	FL	33186-
MIRAMAR	Broward County	FL	33025-3907
MOUNT DORA	Lake County	FL	32757-
MULBERRY	Polk County	FL	33860-
MULBERRY	Polk County	FL	33860-
MULBERRY	Polk County	FL	33860-
NEWBERRY	Alachua County	FL	32669-

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Delta Laboratories, Incorporated
RENEWABLE ENERGY GROUP, INC.
POLYNT COMPOSITES USA, INC
Sherwin-Williams Co
BRENNTAG MID-SOUTH, INC.
LANCO & HARRIS CORP.
Eastman Chemical Company (formerly TAMINCO US INC)
Eastman Chemical Company (formerly TAMINCO US INC)
Eastman Chemical Company (formerly TAMINCO US INC)
Eastman Chemical Company (formerly TAMINCO US INC)
FAR RESEARCH INC (DBA FAR CHEMICAL, INC)
Far Research
Arizona Chemical
ARMSTRONG WORLD INDUSTRIES, INC.
ARIZONA CHEMICAL COMPANY, LLC
REICHHOLD LLC 2
WINFIELD SOLUTIONS
MOSAIC FERTILIZER, LLC, PLANT CITY FACIL
ARIZONA CHEMICAL COMPANY
MOSAIC FERTILIZER, LLC
RICHARD'S PAINT MFG CO INC
PRIDE ENTERPRISES
TURF CARE SUPPLY CORP.
CATALENT PHARMA SOLUTIONS, LLC
MARINE INDUSTRIAL PAINT COMPANY, INC
OPTIMUM NUTRITION
TRADEMARK NITROGEN CORP
BAUSCH & LOMB INCORPORATED
INEOS NEW PLANET BIOENERGY
WHITE SPRINGS AGRICULTURAL CHEMICALS,INC
MERCK SHARP & DOHME CORP - FLINT RIVER PLANT
AGRIUM US INC
Noramco Inc
McGean Rohco
Georgia-Pacific Resins
3M ATLANTA (formerly BONDO/MAR-HYDE CORPORATION)
DSM CHEMICALS NORTH AMERICA, LLC
PCS NITROGEN FERTILIZER L.P.
Prayon Inc.
Occidental Chemical Co
NUTRASWEET COMPANY
DSM COATING RESINS, INC.
SOLVAY SPECIALTY POLYMERS USA, LLC
Ac Ind
Chemtrade Solutions LLC
AMERICAN FIBERS & YARNS CO
SHAW INDUSTRIES GROUP INC PLANT 70

3710 US Highway 326 East
4173 NE 80th AVE
10124 Rocket Blvd
2150 W. Sand Lake Rd.
250 Central Florida Pkwy
600 Mid Florida Dr
4575 HIGHWAY 90 EAST
4575 HIGHWAY 90 EAST
4575 HIGHWAY 90 EAST
4575 HIGHWAY 90 EAST
2210 WILHELMINA COURT, NE
2210 WILHELMINA CT. N.E.
2 EVERITT AVE
300 SOUTH MYRICK ST
411 SOUTH PACE BOULEVARD
425 S PACE BLVD.
4094 PAUL BUCHMAN HIGHWAY
660 East County Line Road
345 KENNY MILL ROAD
8813 HWY. 41 SOUTH
200 Paint St
20706 US Highway 90
422 Webster Turn Drive
2725 SCHERER DRIVE NORTH
4590 60th Avenue North
403 Sawgrass Corporate Pkwy
1216 OLD HOPEWELL ROAD
8500 HIDDEN RIVER PKWY
925 74th Avenue SW
15843 SE 78th Street
3517 RADIUM SPRINGS R
1011 OAK AVE
1440 Olympic Dr.
1314 MURPHY AVE
133 Peachtree St
3700 ATLANTA INDUSTRIAL PARKWAY,NW
1 COLUMBIA NITROGEN ROAD
1460 COLUMBIA NITROGEN ROAD
1610 Marvin Griffin Road
1620 Marvin Griffin Road
1762 LOVERS LANE
31 COLUMBIA NITROGEN ROAD
3702 CLANTON RD
727 Laney Walker Blvd. Extension
Columbia Nitrogen Rd.
140 INDUSTRIAL BLVD
200 IND US TRIAL BLVD

Ocala	Marion County	FL	34475-
OKEECHOBEE	Okeechobee County	FL	34972-
ORLANDO	Orange County	FL	32824-8565
Orlando	Orange County	FL	32809-7690
ORLANDO	Orange County	FL	32824-7601
ORLANDO	Orange County	FL	32824-7008
PACE	Santa Rosa County	FL	32571-0467
PACE	Santa Rosa County	FL	32571-0467
PACE	Santa Rosa County	FL	32571-
PACE	Santa Rosa County	FL	32571-
PALM BAY	Brevard County	FL	32905-2548
Palm Bay	Brevard County	FL	32905-
Panama City	Bay County	FL	32401-
PENSACOLA	Escambia County	FL	32505-
PENSACOLA	Escambia County	FL	32501-5009
PENSACOLA	Escambia County	FL	32502-5009
PLANT CITY	Hillsborough County	FL	33565-
PLANT CITY	Hillsborough County	FL	33565-
PORT ST JOE		FL	32456-
RIVERVIEW	Hillsborough County	FL	33578-
ROCKLEDGE	Brevard County	FL	32955-5807
SANDERSON	Baker County	FL	32087-
SEBRING	Highlands County	FL	33870-
ST PETERSBURG	Pinellas County	FL	33716-1016
ST PETERSBURG	Pinellas County	FL	33714-
SUNRISE	Broward County	FL	33325-6203
TAMPA	Hillsborough County	FL	33619-
TAMPA	Hillsborough County	FL	33637-
VERO BEACH	Indian River County	FL	32968-9702
WHITE SPRINGS	Hamilton County	FL	32096-
ALBANY		GA	
Americus	Sumter County	GA	31709-
Athens	Clarke County	GA	30601-
Atlanta	FULTON	GA	30310-
Atlanta	FULTON	GA	30303-
ATLANTA	FULTON	GA	30331-1098
AUGUSTA	Richmond County	GA	30901-
AUGUSTA	Richmond County	GA	30901-3017
Augusta	Richmond County	GA	30906-3808
Augusta	Richmond County	GA	30906-
AUGUSTA	Richmond County	GA	30901-1869
AUGUSTA	Richmond County	GA	30903-
AUGUSTA	Richmond County	GA	30916-
Augusta	Richmond County	GA	30901-2039
Augusta	Richmond County	GA	30901-
BAINBRIDGE		GA	39817-
BAINBRIDGE		GA	39817-

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0689	110056959055	325191		
0690	110000740887	325211	2606611	
0691	110000358942	325222		
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0693	110000356481	325613	2531811	
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AUTOMATED PACKAGING INC
Renessenz LLC
Pinova, Inc.
Pinova, Inc. (formerly Hercules Incorporated)
Omnova Solutions Inc
SHAW INDUSTRIES GROUP INC PLANT D6
Chemical Products Corporation
Geo Speciality Chemicals
MOHAWK INDUSTRIES HIGHLAND RD EXTRUSION
DOW REICHHOLD SPECIALTY LATEX LLC
KEMIRA CHEMICALS INC - COLUMBUS PLANT
Arch Wood Protection Inc
Scott G Williams
FiberVisions Incorporated
Para-Chem
MOHAWK INDUSTRIES INC - MCFAR LAND RD FACILITY
Southeastern Coatings
TIARCO CHEMICAL
TRINSEO
HARCROS CHEMICALS INC
BEAULIEU FIBERS-APC
BEAULIEU FIBERS-PLANT 20
SHAW INDUSTRIES GROUP INC. PLANT WM
MagellanTerminal Holdings, L.P. - Doraville II Terminal
Transmontaigne Operating Co LP
Magellan Terminal Holdings, L.P. - Doraville I Terminal
Optima Chemical Group L L C
PPG Industries, Inc. - East Point, GA
MOHAWK INDUSTRIES INC ETON F ACILITY
Plasti-Paint Inc.
HOLLINGSWORTH & VOSE COMPANY
Hollingsworth & Vose Company
RECOVERY TECHNOLOGY SOLUTIONS, LLC
GOODWIN CO
Cherokee Brick & Tile Company
ARMSTRONG WORLD INDUSTRIES INC
REMA TIP TOP / NORTH AMERICA
BEAVER MANUFACTURING CO INC.
Kemira Chemicals Inc
Sherwin-Williams Co
ABC COMPOUNDING CO INC
Southwest Georgia Ethanol, LLC
SNF - FLOCRYL-ACRYLAMIDE PLANT
SNF - RICEBORO
EMD Millipore Corporation
Intercat Savannah Inc
INTERNATIONAL PAPER - SAVANNAH

737 HARRY MCCARTY RD. SUITE 403
209 SCM Road
2801 Cook Street
2801 COOK STREET
1601 Hwy. 41, S.W.
341 BEAMER RD
102 Old Mill Rd
701 WISSAHICKON AVE
99 HIGHLAND RD
300 HADGRAFT IND. BLVD
6603 Canal St.
1579 Koppers Rd.
2111 General Arts Rd.
7101 Alcovy Rd
1010 Vista Drive
104 MCFARLAND RD
110 East Callahan Rd
1350 Tiarco Dr
1468 PROSSER DRIVE SE
3452 CORPORATE DR
421 CALLAHAN RD SE
607 FIFTH AVE
902 N HAMILTON ST
2797 Woodwin Road
2836 Woodwin Road
4149 Winters Chapel Road
200 Willacoochee Hwy.
1377 Oakleigh Drive
4140 HWY 411N
12991 GA HWY 34
106 INDUSTRIAL BLVD
300 Industrial Boulevard
325 ALABAMA BOULEVARD
700 PROGRESS CENTER AVE.
3250 Waterville Rd
4520 BROADWAY
1500 INDUSTRIAL BLVD
12 ED NEEDHAM DR
1525 Church St. Extension
6795 South Main St
6970 JONESBORO RD
4433 Lewis B. Collins Road
CHEMICAL PLANT ROAD
ONE CHEMICAL PLANT RD
110 EMD Boulevard
115 Eli Whitney Blvd.
12010 WEST LATHROP AVENUE

BETHLEHEM		GA	30620-
Brunswick	Glynn County	GA	31523-
Brunswick	Glynn County	GA	31520-
BRUNSWICK	Glynn County	GA	31520-
Calhoun	Gordon County	GA	30701-3651
CALHOUN	Gordon County	GA	30703-
Cartersville	Bartow County	GA	30120-1692
Cedartown	Polk County	GA	30125-
CHATSWORTH	MURRAY	GA	30705-
CHICKAMAUGA		GA	
Columbus	Muscogee County	GA	31907-1942
Conley	DeKalb County	GA	30288-
Conyers	Rockdale County	GA	30012-
Covington	Newton County	GA	30014-
Dalton	Whitfield County	GA	30722-
DALTON	Whitfield County	GA	30722-
Dalton	Whitfield County	GA	30721-
Dalton	Whitfield County	GA	30721-
DALTON	Whitfield County	GA	
Dalton	Whitfield County	GA	30720-
DALTON	Whitfield County	GA	30721-
DALTON	Whitfield County	GA	30721-
DALTON	Whitfield County	GA	30720-
Doraville	DeKalb County	GA	30360-
Doraville	DeKalb County	GA	30360-
Doraville	DeKalb County	GA	30360-
Douglas	Coffee County	GA	31533-
East Point	Fulton County	GA	30344-
ETON		GA	30724-
Franklin	Heard County	GA	30217-
HAWKINSVILLE	Pulaski County	GA	
Hawkinsville	Pulaski County	GA	31036-
JACKSON		GA	
LAWRENCEVILLE	GWINNETT	GA	30043-
Macon	Bibb County	GA	31206-1246
MACON	Bibb County	GA	31206-
MADISON		GA	30650-
MANSFIELD		GA	30055-
Marietta	Cobb County	GA	30060-
Morrow	Clayton County	GA	30260-
MORROW	Clayton County	GA	30260-
Pelham	Mitchell County	GA	31779-
RICEBORO	Liberty County	GA	31323-
RICEBORO	Liberty County	GA	31323-
Savannah	Chatham County	GA	31407-
Savannah	Chatham County	GA	31408-
SAVANNAH	Chatham County	GA	31415-

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0743	110014058508	424710		
0744	110022575480	325193	15414611	
0745	110056955488	325199	16734311	
0746	110037236103	325193	12799811	
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0750	110010507503	311221	8121311	
0751	110014425050	325411	7892411	NEI12130
0752	110024519225	325193	15415811	
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0758	110001324111	486910	3925211	NEI2IA103006
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0763	110000413099	325910	3164211	
0764	110021320444	486910	3163911	NEI2IA01-114
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Southern States Phosphate & Fertilizer
Savannah Acid Plant LLC
Union Camp
Vulcan Performance Chemicals
SHAW INDUSTRIES GROUP INC PLANT 22
GEORGIA-PACIFIC CHEMICALS LLC
BAYER CROPSCIENCE - WOODBINE PLANT
State of Hawaii Diamond Head Terminal Piers 1 an
State of Hawaii Pier 5
State of Hawaii Pier 6
State of Hawaii Barbers Point Harbor Barge Wharf
VALERO RENEWABLE FUELS CO, LLC - ALBERT CITY
AG PROCESSING INC-ALGONA
FLINT HILLS RESOURCES ARTHUR, LLC
POET BIOREFINING - ASHTON
Diamond Vogel Paint Company
DANISCO US INC
ADM CORN PROCESSING
CAMBREX CHARLES CITY, INC / Salsbury Chemicals
VALERO RENEWABLE FUELS CO, LLC - CHARLES CITY
MAGELLAN PIPELINE CO, LLC - MASON CITY
ADM CLINTON BIOPROCESSING - CLINTON
NUMAKE, LLC
EQUISTAR CHEMICALS LP
POET BIOREFINING - COON RAPIDS
MAGELLAN PIPELINE CO, LLC - IOWA CITY
PINNACLE ETHANOL, LLC DBA POET BIOREFINING CORNING
SOUTHWEST IOWA RENEWABLE ENERGY, LLC
GREEN VALLEY CHEMICAL CORPORATION
THE ANDERSONS DENISON ETHANOL, LLC
SIEGWERK USA INC - 129 SE 18TH ST
MAGELLAN PIPELINE CO, LLC - DES MOINES
Iowa Paint Manufacturing Company, Inc.
MAGELLAN PIPELINE CO., LLC. - DUBUQUE
MAGELLAN PIPELINE CO, LLC - FORT DODGE TRMNL
PRAXAIR, INC
TWIN STATE, INC.
BIG RIVER UNITED ENERGY, LLC - DYERSVILLE
AJINOMOTO FOOD INGREDIENTS, LLC
CARGILL INC-EDDYVILLE
CARGILL INC-EDDYVILLE
WACKER CHEMICAL CORP
POET DSM ADVANCED BIOFUELS PROJECT LIBERTY
FLINT HILLS RESOURCES FAIRBANK LLC
VALERO RENEWABLE FUELS CO, LLC - FORT DODGE
CARGILL INC-FORT DODGE
KOCH FERTILIZER FT. DODGE, LLC

1600 E President St.
One Kerr-McGee Road
5544 Oakdale Rd.
1990 WARRENTON ROAD
838 SHILOH ROAD
5954 UNION CARBIDE RD
677 Ala Moana Blvd.
PIER 5
PIER 6
91-119 HANUA ST.
2356 510TH ST
2108 140TH AVE
2585 QUAIL AVE
4970 260TH ST N
1506 BLUFF RD
1000 41st Ave. Dr. S.W.
1350 WACONIA AVE SW
1205 11TH ST
1787 QUARRY RD
2810 MAIN AVE
1251 BEAVER CHANNEL PKWY
301 17TH AVENUE SOUTH
3400 ANAMOSA RD (HWY 30 W)
1015 GRANT AVE
912 FIRST AVE
1680 BROOKS RD
10868 189TH ST
1284 N CHERRY ST
2404 HWY 30 W
129 SE 18TH ST
2503 SE 43RD ST
97 Indiana Avenue
8038 ST. JOE'S PRAIRIE RD
3140 200TH ST
3160 200TH ST
2206 Old Hwy. 6
3294 VINE RD
1 Ajinomoto Dr.
1 CARGILL DR (CTY RD T-61)
1 CARGILL DR (CTY RD T-61)
1 WACKER DR
4724 380TH ST
1277 102ND ST
1930 HAYES AVE
1950 HARVEST AVE
3162 200TH ST

Savannah	Chatham County	GA	31402-
Savannah	Chatham County	GA	31404-
Savannah	Chatham County	GA	
Smyrna	Cobb County	GA	30082-
THOMSON		GA	30824-
VIENNA		GA	
WOODBINE		GA	31569-
HONOLULU	HONOLULU	HI	
HONOLULU	HONOLULU	HI	
HONOLULU	HONOLULU	HI	
KAPOLEI	HONOLULU	HI	96707-
ALBERT CITY	Buena Vista County	IA	50510-
ALGONA	Kossuth County	IA	50511-
ARTHUR	Ida County	IA	51431-
ASHTON	Osceola County	IA	51232-
Burlington		IA	52601-
Cedar Rapids	Linn County	IA	52404-
CEDAR RAPIDS	Linn County	IA	52404-
CHARLES CITY	Floyd County	IA	50616-
CHARLES CITY	Floyd County	IA	50616-
CLEAR LAKE	Cerro Gordo County	IA	50428-
CLINTON	Clinton County	IA	52732-
CLINTON	Clinton County	IA	
CLINTON	Clinton County	IA	52732-
COON RAPIDS	Guthrie County	IA	50058-
CORALVILLE	Johnson County	IA	52241-
CORNING	Adams County	IA	50841-
COUNCIL BLUFFS	Pottawattamie County	IA	51503-
CRESTON	Union County	IA	50801-
DENISON	Crawford County	IA	51442-
DES MOINES	Polk County	IA	50317-4926
DES MOINES	Polk County	IA	50317-
Des Moines	Polk County	IA	50314-
DUBUQUE		IA	52003-
DUNCOMBE	Webster County	IA	50532-
DUNCOMBE	Webster County	IA	50532-
Durant	Cedar County	IA	52747-
DYERSVILLE	Delaware County	IA	52040-
Eddyville	Monroe County	IA	52553-
EDDYVILLE	Monroe County	IA	52553-
EDDYVILLE	Monroe County	IA	52553-
EDDYVILLE	Monroe County	IA	52553-
EMMETSBURG	Palo Alto County	IA	50536-
FAIRBANK	Buchanan County	IA	50629-
FORT DODGE	Webster County	IA	50501-
FORT DODGE	Webster County	IA	50501-
FORT DODGE	Webster County	IA	50501-

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0823	110000743982	32518	932011	

THE SCOTTS CO., ORTHO BUSINESS GROUP
E I DUPONT DE NEMOURS & CO INC
Quad-County Corn Processors
CORN, LP
FRONTIER ETHANOL LLC DBA POET BIOREFINING - GOWRIE
LOUIS DREYFUS COMMODITIES GRAND JUNCTION, LLC
QuadGraphics (formerly Siegwerk)
Twin State Inc
POET BIOREFINING - HANLONTOWN
VALERO RENEWABLE FUELS CO, LLC - HARTLEY
DODGEN INDUSTRIES, INC.
FLINT HILLS RESOURCES IOWA FALLS, LLC
CARGILL INC-IOWA FALLS
POET BIOREFINING - JEWELL
3M CO KNOXVILLE
GREEN PLAINS HOLDINGS II, LLC - LAKOTA
HOMELAND ENERGY SOLUTIONS, LLC
LITTLE SIOUX CORN PROCESSORS, LLLP
Diamond Products Company
GOLDEN GRAIN ENERGY, LLC - MASON CITY
FLINT HILLS RESOURCES MENLO LLC
PLYMOUTH ENERGY, LLC
MAGELLAN PIPELINE CO, LLC - MILFORD
GRAIN PROCESSING CORP
MONSANTO CO - MUSCATINE
MONSANTO CO - MUSCATINE
MONSANTO CO - MUSCATINE
LINCOLNWAY ENERGY, LLC
Diamond Vogel (formerly Vogel Paint & Wax Co., Inc.)
ABSOLUTE ENERGY, LLC
CF INDUSTRIES NITROGEN LLC
NUTRA FLO COMPANY : NULEX
AG PROCESSING INC-SERGEANT BLUFF
FLINT HILLS RESOURCES SHELL ROCK LLC
GREEN PLAINS SHENANDOAH, LLC
SIOUXLAND ENERGY & LIVESTOCK COOP
MAGELLAN PIPELINE CO, LLC - SIOUX CITY
NUTRA-FLO COMPANY
GREEN PLAINS SUPERIOR, LLC
HYDRITE CHEMICAL COMPANY
VAN DIEST SUPPLY CO
BIG RIVER RESOURCES WEST BURLINGTON, LLC
MAGNOLIA NITROGEN IDAHO (MAGNIDA)
MAACO COLLISION REPAIR AND AUTO CENTER
PACIFIC ETHANOL MAGIC VALLEY LLC
J R SIMPLOT COMPANY-DON SIDING
P4 PRODUCTION LLC (TV FACILITY)

1910 48th St.
801 35TH ST
6059 159TH ST
1303 HWY 3 E
1562 320TH ST
1149 U AVE
401 N Townline Rd
1455 140th St.
3638 FIR AVE
3260 VAN BUREN AVE
1505 13TH ST N HUMBOLDT
21050 140TH ST
602 INDUSTRIAL RD
2601 320TH ST
3406 E PLEASANT ST
1660 428TH ST
2779 HWY 24
4808 F AVE
715 S 3rd Avenue
1822 43RD ST SW
3363 TALON AVE
22234 K-42
2451 HIGHWAY 71
1300 & 1600 OREGON ST
2500 WIGGINS RD
2500 WIGGINS RD
2500 WIGGINS RD
59511 W LINCOLN HWY
1020 Albany Place South, P.O. BOX 440
1372 STATE LINE RD
1182 260TH ST
2717 Port Neal Circle
2753 PORT NEAL CIRCLE
30750 212TH ST (HWY 3)
4124 AIRPORT RD
3890 GARFIELD AVE
4300 41ST ST
514 S. Floyd Blvd.
1495 320TH AVE
2815 Wcf&N Dr.
1434 220TH ST (HWY 20 W)
15210 103RD ST
3051 LAKE CHANNEL RD
3236 E AMITY RD
2600 WASHINGTON AVE
1150 W. Highway 30
1853 Hwy 34

Fort Madison	Lee County	IA	52627-
FORT MADISON	Lee County	IA	52627-
Galva	Ida County	IA	51020-
GOLDFIELD	Wright County	IA	50542-
GOWRIE	Webster County	IA	50543-
GRAND JUNCTION	Greene County	IA	50107-
Greenfield		IA	50849-
Hampton	Franklin County	IA	50441-
HANLONTOWN	Worth County	IA	50444-
HARTLEY	O'Brien County	IA	51346-
HUMBOLDT	Humboldt County	IA	50548-
IOWA FALLS	Hardin County	IA	50126-
IOWA FALLS	Hardin County	IA	50126-
JEWELL	Hamilton County	IA	50130-
KNOXVILLE	Marion County	IA	50138-
LAKOTA	Kossuth County	IA	50451-
LAWLER	Chickasaw County	IA	52154-
MARCUS	Cherokee County	IA	51035-
Marshalltown		IA	50158-
MASON CITY	Cerro Gordo County	IA	50401-
MENLO	Guthrie County	IA	50164-
MERRILL	Plymouth County	IA	51038-
MILFORD		IA	51351-
MUSCATINE	Muscatine County	IA	52761-
MUSCATINE	Muscatine County	IA	52761-
MUSCATINE	Muscatine County	IA	52761-
MUSCATINE	Muscatine County	IA	52761-
NEVADA	Story County	IA	50201-
Orange City		IA	51041-
SAINT ANSGAR	Mitchell County	IA	50472-
SERGEANT BLUFF	Woodbury County	IA	51054-
Sergeant Bluff	Woodbury County	IA	51054-
SERGEANT BLUFF	Woodbury County	IA	51054-
SHELL ROCK	Butler County	IA	50670-
SHENANDOAH	Page County	IA	51601-
SIOUX CENTER	Sioux County	IA	51250-
SIOUX CITY	Woodbury County	IA	51108-
Sioux City	Woodbury County	IA	51101-
SUPERIOR	Dickinson County	IA	51360-
Waterloo	Black Hawk County	IA	50703-
WEBSTER CITY	Hamilton County	IA	50595-
WEST BURLINGTON	Des Moines County	IA	52655-
AMERICAN FALLS		ID	
BOISE		ID	83716-
BURLEY	Cassia County	ID	83318-
POCATELLO	Power County	ID	83201-
SODA SPRINGS	Caribou County	ID	83276-

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0826	110001287090	325910	2564711	
0827	110022523526	325520	9725411	
0828	110010017285	325998	7332211	
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0830	110018070380	325211	7414611	
0831	110000436047	325998	7414711	
0832	110000559690	325194	2752211	
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0834	110018346342	486910		NEIIL0316300
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0839	110016689314	325520	9730311	
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0870	110018351889	325314	1804711	

NU-WEST INDUSTRIES, INC (AGRIUM CONDA PHOSPHATE OPERATIONS)
Earth Friendly Products
General Press Colors Ltd
Simpson Stong-Tie Anchor Systems
GE Betz Inc
Solvay Fluorides LLC
Arkema Coating Resins
Prestone Products Corp
Blue Island Phenol LLC
Tms Manufacturing/W.C. Richards Company
Teppco - Blue Island Terminal
Bluff City Minerals Acquisition LLC Highcal Plant
Patriot Renewable Fuels LLC
Kinder Morgan Liquid Terminals LP
GE Health Care
HB Fuller Construction Products Inc
Butterfield Color Inc
River Valley Coatings Inc
Poly USA Inc
Aurora Specialty Textiles Group Inc
Optimum Nutrition
Dyno Nobel Inc
M45-PC Coal Additive Facility
PPG Industries
Varn International Inc A Flint Group Co
Hentzen Coatings, Inc. (formerly Morton International Inc., Morton Industrial Coatings)
Williams-Hayward Protective Coatings Inc
Superior Manufacturing Group Inc
Ester Solutions
WR Grace & Co
Nalco Co
Afton Chemical Corp
HEXION INC
Momentive Specialty Chemicals Inc
Videojet Technologies Inc
St Clair Service Co
SB Boron Corp
GJ Nikolas Co
BioVantage Fuels LLC
Deveco Corp
Core Finishing Inc
Solvay USA Inc
NuStar Terminals Services Inc
BLUE ISLAND PHENOL LLC
WW Henry Co
CSL Behring LLC
Gateway FS Inc

3010 Conda Rd
111 S Rohlwing Rd
120 Fairbanks St
136 Official Rd
333 S Lombard Rd
3500 Missouri Ave
12840 S Pulaski Rd
13160 S Pulaski Rd
3350 W 131st St
3555 West 123rd St
3645 W 131st St
4007 College
101 Patriot Way
8500 W 68th St
3350 N Ridge Ave
1105 S Frontenac
625 W Illinois Ave
800 N Highland Ave
841 N Russell Ave
911 N Lake St
948 Meridian Lake Drive
31879 State Hwy 106
7800 South Cilco Lane
1020 Olympic Dr
1333 N Kirk Rd
1500 Lathem Street
5241 W 70th Pl
5655 W 73rd St
5851 W 73RD ST
6051 W 65th St
6216 W 66th Pl
7201 W 65th St
8600 W 71ST ST
8600 W 71st St-B
1 Marsh Dr
1036 S Greenmount Rd
20 Davis
2800 Washington Blvd
1201 Crosslink Pkwy
424 Fairview St
717 Thomas Dr
14000 S Seeley Ave
3210 W 131st St
3350 W 131ST ST
150 Mooney Dr
Rte 50 & Armour Rd
50 Mine St

SODA SPRINGS	Caribou County	ID	83276-
Addison	DuPage County	IL	60101-
Addison	DuPage County	IL	60101-3120
Addison	DuPage County	IL	60101-
Addison	DuPage County	IL	60101-
Alorton	St. Clair County	IL	62205-3104
Alsip	Cook County	IL	60803-
Alsip	Cook County	IL	60803-
Alsip	Cook County	IL	60803-
Alsip	Cook County	IL	60803-
Alsip	Cook County	IL	60803-
Alton	Madison County	IL	62002-
Annawan	Henry County	IL	61234-
ARGO	Cook County	IL	60501-
Arlington Heights	Cook County	IL	60004-
Aurora	DuPage County	IL	60504-
Aurora	Kane County	IL	60506-
Aurora	Kane County	IL	60506-2204
Aurora	Kane County	IL	60506-
Aurora	Kane County	IL	60506-
Aurora	DuPage County	IL	60504-
Barry	Pike County	IL	62363-
Bartonville	Peoria County	IL	61607-
Batavia	Kane County	IL	60510-
Batavia	Kane County	IL	60510-
Batavia	Kane County	IL	60510-
Bedford Park	Cook County	IL	60638-
Bedford Park	Cook County	IL	60638-
Bedford Park	Cook County	IL	60638-
Bedford Park	Cook County	IL	60638-
Bedford Park	Cook County	IL	60638-
Bedford Park	Cook County	IL	60638-4607
BEDFORD PARK	Cook County	IL	60501-
Bedford Park	Cook County	IL	60501-
Belleville	St. Clair County	IL	62220-
Belleville	St. Clair County	IL	62222-0489
Bellwood	Cook County	IL	60104-
Bellwood	Cook County	IL	60104-1942
Belvidere	Boone County	IL	61008-
Belvidere	Boone County	IL	61008-
Bensenville	DuPage County	IL	60106-
Blue Island	Cook County	IL	60406-
Blue Island	Cook County	IL	60406-
Blue Island	Cook County	IL	60406-
Bourbonnais	Kankakee County	IL	60914-
Bradley	Kankakee County	IL	60915-
Breese	Clinton County	IL	62230-

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0917	110001292397	325998	1766011	

Marathon Ashland Pipe Line LLC
Chicago Aerosol - Bridgeview Facility
Enthone Inc
Karnak Midwest LLC
RA Kerley Ink Engineers Inc
Chase Products Co
Nanophase Technologies Corp
PHILLIPS 66 PIPELINE LLC
ECOLAB INC
Gelita USA Inc
Plastics Color Corp of Illinois
Ashland Specialty Chemical Co
Ashland Specialty Chemical Co
Roman Adhesives Inc
Cook Polymer Technologies Canton
Rogers Corp - HPF-B
HENKEL CORP
KNS Companies Inc
I Pulloma Paints / James B. Day & Co.
PCCR USA Inc
A Schulman
Tricounty FS Inc
True Value Manufacturing Company
Fox Valley Systems
BP AMOCO CHEMICAL CO
CRANE COMPOSITES INC
The Scotts Co
Diversified CPC International Inc
IMTT Illinois
STYROLUTION AMERICA LLC
Styrolution America LLC
Americas Styrenics LLC
Veolia Water North America Operating Services inc.
Naz Dar Co
Luster Prod Inc
Nuance Solutions Inc
Sherwin-Williams
Sherwin-Williams Co
Kinder Morgan Liquids Terminals LLC
Cargill Inc
PVS Chemicals Inc (Illinois)
Safety-Kleen Systems Inc
Spraylat Corp
Orlandi Statuary
VJ Dolan & Co Inc
Federated Paint Mfg. Co. Inc.
Genieco Inc

Corporation and Chestnut St
8407 S 77th Ave
9809 Industrial Dr
2601 Gardner Rd
2700 S 12th Ave
2801 Gardner Rd
453 Commerce St
3300 MISSISSIPPI AVE
1210 COMMERCIAL AVE.
10 Wentworth Ave
14201 Paxton Ave
142nd St And Paxton Ave
14303 Paxton Ave
824 State St
225 South 3rd Ave
171 W St Charles Rd
245 E KEHOE BLVD
475 Randy Rd
1 Day Lane
400 E Cottage Ave
400A Maple Ave
Hwy 108 W
201 JANDUS ROAD
640 INDUSTRIAL DR
23425 AMOCO RD
23525 W EAMES ST
23580 Bluff Rd
24338 W Durkee Rd
24420 W Durkee Rd
25846 SW FRONTAGE RD
25846 SW Frontage Rd
26332 S Frontage Rd
Interstate 55 & Arsenal Rd E Frontage Rd
1087 N North Branch
1104 W 43rd St
1140 E 103rd St
11541 S. CHAMPLAIN AVENUE
11700 S Cottage Grove
12200 S Stony Island Ave
12201 S Torrence
12260 S Carondolet Ave
1445 W 42nd St
1701 E 122nd St
1801 N Central Park
1830 N Laramie Ave
1882 S. Normal Avenue
200 N Laflin St

Bridgeport	Lawrence County	IL	62417-
Bridgeview	Cook County	IL	60455-
Bridgeview	Cook County	IL	60455-
Broadview	Cook County	IL	60153-
Broadview	Cook County	IL	60153-
Broadview	Cook County	IL	60155-
Burr Ridge	DuPage County	IL	60521-
CAHOKIA		IL	62202-
CAIRO		IL	62914-
Calumet City	Cook County	IL	60409-
Calumet City	Cook County	IL	60409-
Calumet City	Cook County	IL	60409-
Calumet City	Cook County	IL	60409-
Calumet City	Cook County	IL	60409-2533
Canton	Fulton County	IL	61520-
Carol Stream	DuPage County	IL	60188-
CAROL STREAM	DuPage County	IL	60188-
Carol Stream	DuPage County	IL	60187-
Carpentersville	Kane County	IL	60110-
Carpentersville	Kane County	IL	60110-
Carpentersville	Kane County	IL	60110-
Carrollton	Greene County	IL	62016-
Cary	McHenry County	IL	60013-
Cary	McHenry County	IL	60013-
CHANNAHON	Will County	IL	60410-
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Channahon	Will County	IL	60410-
Channahon	Will County	IL	60410-
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Channahon	Will County	IL	60410-
Channahon	Will County	IL	60410-
Channahon	Will County	IL	60410-
Chicago	Cook County	IL	60622-
Chicago	Cook County	IL	60609-
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Chicago	Cook County	IL	60633-
Chicago	Cook County	IL	60617-
Chicago	Cook County	IL	60633-
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RR Street & Co Inc
EPS D/B/A Valspar
MRC Polymers Inc
Cygnus Corp
REZ Packaging Inc
Metal Finishing Research Corp
Cudner & O'Connor Co
WR Grace
Candy & Co
Crawford Laboratories
Occidental Chemical Corp
Cedar Concepts
Stutz Co
Vantage Oleochemicals Inc
Daubert Chemical Co
Kocour Co
SUN CHEMICAL CORP
Inx International Ink Co
Clorox Products Mfg Co
Sherwin Williams Co
Rycoline Products Inc
National Casein Co
WR Grace & Co
Innophos Inc
Korex Chicago LLC
Sun Chemical - Clearing Plant
CHICAGO SPECIALTIES, LLC
Matchless Metal Polish Co
Carbit Paint Co
CPC Laboratories Inc
Solvay USA Inc
Innophos Inc
Nufarm Americas Inc
Behr Process Corp
Engineered Polymer Solutions dba Valspar Coatings
Polychem Services Inc
KOPPERS INC
Multicolor Specialities, Inc., (formerly Barrett Varnish)
CA Acquisition LLC
Am-C LLC
3M Cordova
KIK Custom Products Inc
EnvirOx LLC
Honeywell International Inc
REG Danville LLC
Lebanon Chemical Corp
TATE & LYLE INGREDIENTS AMERICAS LLC

2353 S Blue Island Ave
2841 S. Ashland Ave.
3307 S Lawndale
340 E 138th St
3735 S Racine Ave
4025 S Princeton
4035 W Kinzie St
4099 W 71st St
4100 W 76th St
4165 S Emerald Ave
4201 W 69th St
4342 S. WOLCOTT AVE
4450 W Carroll Ave
4650 S Racine
4700 S Central Ave
4800 S St Louis Ave
4910 S MONITOR AVE
5001 S Mason Ave
5064 S Merrimac
549 E 115th St
5540 Northwest Highway
601 W 80th St
6050 W 51st St
612 E 138th
6200 W 51st St
6600 South Melvina Avenue
735 E 115TH ST
840 W 49th Pl
927 W Blackhawk St
9300 S Sangamon St
1020 State St
1101 Arnold St
220 E 17th St
270 State St
290 E Joe Orr Rd
374 E Joe Orr Rd
3900 S LARAMIE AVE
5050 WEST 16TH STREET
1300 E North St
134 CIPS Ln
22614 Route 84 N
1 W Hegeler Ln
1938 Fairchild St
209 Brewer Rd
300 N Anderson St
508 W Ross Lane
2200 E ELDORADO ST

Chicago	Cook County	IL	60608-
Chicago	Cook County	IL	61104-
Chicago	Cook County	IL	60623-
Chicago	Cook County	IL	60827-1828
Chicago	Cook County	IL	60609-
Chicago	Cook County	IL	60609-
Chicago	Cook County	IL	60624-
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Chicago	Cook County	IL	60629-5718
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Chicago	Cook County	IL	60624-
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Chicago	Cook County	IL	60638-
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CHICAGO	Cook County	IL	60683-
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CHICAGO	Cook County	IL	
Chicago	Cook County	IL	60609-
Chicago	Cook County	IL	60622-2519
Chicago	Cook County	IL	60620-
Chicago Heights	Cook County	IL	60411-
Chicago Heights	Cook County	IL	60411-
Chicago Heights	Cook County	IL	60411-
Chicago Heights	Cook County	IL	60411-
Chicago Heights	Cook County	IL	60411-
Chicago Heights	Cook County	IL	60411-
CICERO	Cook County	IL	60804-
Cicero	Cook County	IL	60804-
Coal City	Grundy County	IL	60416-1254
Coffeen	Montgomery County	IL	62942-
Cordova	Rock Island County	IL	61242-
Danville	Vermilion County	IL	61832-8398
Danville	Vermilion County	IL	61832-
Danville	Vermilion County	IL	61832-
Danville	Vermilion County	IL	61832-
Danville	Vermilion County	IL	61834-5136
DECATUR	Macon County	IL	62521-1578

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ADM Development Products
Meda Pharmaceuticals Inc
Baxter Healthcare Corp
Sandoz Agro Inc
DeLaval Manufacturing
Mark Andy Inc
Polychemie Inc
Explorer Pipeline Co
Kempen Paint Co
Rentech Nitrogen LLC
Brady McCasland Inc
Rockwood Pigments NA Inc
NUPLEX RESINS LLC
United Packaging Corp
Buckeye Terminals LLC
EI Dupont De Nemours & Co
DSM Desotech Inc
Henkel Corporation
First Priority Inc
Universal Chemicals & Coatings, Incorporated
Universal Chemicals & Coatings Inc
Active Biomaterials
Precision Ink Corporation
Dupli-Color Products Company (formerly Sherwin-Williams?)
Penray Companies
VIDEOJET TECHNOLOGIES
PolyOne Corp
Rohm & Haas Chemicals LLC
Becker Specialty Corp
STEPAN CO
Tapecoat Co Inc
Irmco-International Ref & Mfg Co
Philip Lochman & Co
Chemtrade Solutions LLC
The Sherwin-Williams Co
Buckeye Terminals LLC
Blachford Corp
Adhesive Systems Inc
Americoats Coatings International Inc
Big River Resources Galva LLC
Dynachem Inc
DYNACHEM INC
One Earth Energy LLC
INCOBRASA INDUSTRIES LTD
Dober Chemical Corp
Center Point Terminals Co
Mallinckrodt LLC

3210 Pkwy Dr
705 E Eldorado St
One Baxter Pkwy
1300 E Touhy Ave
1855 S Mt Prospect Rd
201 W Oakton
13931 Indiana Ave
1355 Robins Rd
2500 State St
16675 Rte 20 W
2000 Converse Ave
2001 Lynch Ave
2904 MISSOURI AVE
89 S 18th St
18264 Rte 45 N
2830 US Highway 24 E
1122 St Charles St
1345 Gasket Dr
1585 Todd Farm Rd
1975 Fox Ln
1124 Elmhurst Rd
1300 Chase Ave
151 Stanley St
1601 NICHOLAS BLVD.
1801 Estes Ave
1855 ESTES AVE
2400 E Devon Ave
2401 E Pratt Blvd
2500 Delta Lane
22500 W MILLSDALE RD
1520 Lyons St
2117 Greenleaf St
2405 Oakton St
2500 Kingshighway
14 Industrial Park
266 E Shafer
401 Center Rd
9411 Corsair
11135 Franklin St
1100 SE 2nd St
Maple Grove Rd
P.O. Box 19
202 N Jordan Dr
540 E US HWY 24
333 W 195th St
2801 Rock Rd
100 Louis Latzer Dr

Decatur	Macon County	IL	62521-
Decatur	Macon County	IL	62523-1125
Deerfield	Lake County	IL	60015-
Des Plaines	Cook County	IL	60018-
Des Plaines	Cook County	IL	60018-
Des Plaines	Cook County	IL	60018-
Dolton	Cook County	IL	60419-
East Alton	Madison County	IL	62024-
East Carondelet	St. Clair County	IL	62240-
East Dubuque	Jo Daviess County	IL	61025-8605
East Saint Louis	St. Clair County	IL	62203-
East Saint Louis	St. Clair County	IL	62204-1717
EAST SAINT LOUIS	St. Clair County	IL	62205-1123
East Saint Louis	St. Clair County	IL	62205-
Effingham	Effingham County	IL	62401-
El Paso	Woodford County	IL	61738-
Elgin	Kane County	IL	60120-
Elgin	Cook County	IL	60120-
Elgin	Kane County	IL	60123-
Elgin	Kane County	IL	60123-
Elk Grove Village	Cook County	IL	60007-
Elk Grove Village	Cook County	IL	60007-
Elk Grove Village	Cook County	IL	60007-
Elk Grove Village	Cook County	IL	60007-
Elk Grove Village	Cook County	IL	60007-
ELK GROVE VILLAGE	Cook County	IL	60007-
Elk Grove Village	Cook County	IL	60007-
Elk Grove Village	Cook County	IL	60007-
Elk Grove Village	DuPage County	IL	60007-
ELWOOD	Will County	IL	60421-
Evanston	Cook County	IL	60201-
Evanston	Cook County	IL	60202-1088
Evanston	Cook County	IL	60202-
Fairmont City	St. Clair County	IL	62201-
Flora	Clay County	IL	62839-
Forsyth	Macon County	IL	62535-
Frankfort	Will County	IL	60423-
Frankfort	Will County	IL	60423-
Franklin Park	Cook County	IL	60131-
Galva	Henry County	IL	61434-
Georgetown	Vermilion County	IL	61846-
GEORGETOWN	Vermilion County	IL	61846-
Gibson City	Ford County	IL	60936-
GILMAN	Iroquois County	IL	60938-
Glenwood	Cook County	IL	60425-
Granite City	Madison County	IL	62040-
Greenville	Bond County	IL	62246-

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Roquette America Inc
PQ Corp
Vantage Specialties Inc
Domino Amjet Inc
Buckeye Terminals LLC
Linde LLC
Buckeye Terminals LLC
Pearl Paints North America Inc
Industrial Specialty Chemicals Inc
MARQUIS ENERGY LLC
Mexichem Specialty Resins Inc
EMERALD PERFORMANCE MATERIALS LLC
United Suppliers Inc
INX International Ink Co
Sherwin Williams Co
National Industrial Coatings Inc DBA Nicoat Inc
United Gilsonite Laboratories
Seeler Industries Inc
Apex Material Technologies LLC
PQ Corporation
Mpg Industries Inc
Olin Corp
Matheson Trigas Inc
Dow
Rho Chemicals Co
Ecolab Inc
Desoto Inc - Chemical Products Div
Exxon Mobil Oil Corp
Air Products & Chemicals Inc
Rohm & Haas Chemical LLC
BASF Corp
Buckeye Terminals LLC
Chemical Research Technology
Sun Chemical - Kankakee
Valspar Coatings - kankakee
Euclid Chemical Co
B-B Chemical Corp
Carus Chemical Co
Hospira Inc
NB Coatings (formerly Rohm and Haas-Lansing Facility, formerly Morton Automotive Coatings)
Hannah Marine Corp Main Wharf and Barge Mooring
IMTT - Lemont
CITGO PETROLEUM CORP
KA Steel Chemicals Inc
CCI Manufacturing IL Corp
Adkins Energy LLC
Eaton Electrical

1550 Northwestern Ave
1945 Delany Rd
3938 Porett Dr
4321 Lee Ave
600 E Lincoln Memorial Pkwy
1200 S Delmar
220 E Hawthorne
15600 Lathrop St
16880 S Lathrop
11953 PRAIRIE INDUSTRIAL PKWY
1546 CR 1450 N
1550 CR 1450 N
1557 County Rd 1400 N
1000 Maple Rd
1111 Maple Ave
1600 Glenlake Ave
550 Capitol Way
1 Genstar Dr
10 Industry Ave
101 Ingalls Ave
1450 Amherst Ct
1945 Patterson Rd
200 Alessio Dr
2050 N. BROADWAY
30 Industrial Ave
3001 Channahan Rd
900 E Washington St
I 55 & Arsenal Rd
I-55 & Arsenal Rd
1400 Harvard Dr
2525 SOUTH KENSINGTON ROAD
275 N 2750 W Rd
2850 Festival Dr
3200 Festival Drive
901 North Greenwood Ave.
3835 State Route 72
9600 W Ogden Ave
1500 Eighth St
375 N Field Dr
2701 E. 170th
13155 Grant Road
13589 Main St
135TH ST AND NEW AVE
15185 Main St
15550 Canal Bank Rd
4350 W Galena Rd
1725 1200th Ave

Gurnee	Lake County	IL	60031-
Gurnee	Lake County	IL	60031-
Gurnee	Lake County	IL	60031-
Gurnee	Lake County	IL	60031-
Harristown	Macon County	IL	62537-
Hartford	Madison County	IL	62048-0037
Hartford	Madison County	IL	62048-
Harvey	Cook County	IL	60426-
Harvey	Cook County	IL	60426-
HENNEPIN	Putnam County	IL	61327-
Henry	Marshall County	IL	61537-
HENRY	Marshall County	IL	61537-
Henry	Marshall County	IL	61537-
Homewood	Cook County	IL	60430-
Homewood	Cook County	IL	60430-
Itasca	DuPage County	IL	60143-
Jacksonville	Morgan County	IL	62651-
Joliet	Will County	IL	60435-
Joliet	Will County	IL	60435-
Joliet	Will County	IL	60435-
Joliet	Will County	IL	60433-9716
Joliet	Will County	IL	60434-
Joliet	Will County	IL	60433-
Joliet	Will County	IL	60435-
Joliet	Will County	IL	60435-
Joliet	Will County	IL	60436-
Joliet	Will County	IL	60433-
Joliet	Will County	IL	60434-
Joliet	Will County	IL	60434-
Kankakee	Kankakee County	IL	60901-
Kankakee	Kankakee County	IL	60901-0191
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Kankakee	Kankakee County	IL	60901-
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Kankakee	Kankakee County	IL	60901-
Kirkland	DeKalb County	IL	60146-
La Grange	Cook County	IL	60525-
La Salle	La Salle County	IL	61301-3500
Lake Forest	Lake County	IL	60045-
Lansing	Cook County	IL	60438-
LEMONT	Cook County	IL	60439-
Lemont	Cook County	IL	60439-
LEMONT	Will County	IL	60439-
Lemont	Cook County	IL	60439-3773
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Lena	Stephenson County	IL	61048-
Lincoln		IL	62656-

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Valent BioSciences Corp
Pelron Corp
Free Flow-Rockford LLC
Abengoa Bioenergy of Illinois LLC
Aeropress Corp
BP Pipelines North America Inc
Chemtura Corp
Degussa/Goldschmidt Chemical
Ingredion Inc
Performance Chemicals
Engineered Polymer Solutions
Diagaph/ITW Co
Agrium US Inc
Marathon Ashland Pipe Line LLC
Akzo Nobel
Ace Hardware Paint Division
The Valspar Corporation
Akzo Nobel
Honeywell UOP (formerly UOP LLC)
Lubrizol Advanced Materials Inc
Chroma Corp
Fresenius Kabi USA LLC
Alberto-Culver USA Inc
CELANESE LTD
National Starch and Chemical Company
Honeywell International Inc
Dober Chemical Corp
EPS Valspar (formerly Lilly Industries (USA), Inc.)
VVF Illinois Services LLC
Rochester Midland Corp
REICHHOLD LLC 2
HB Fuller
Forbo Adhesives LLC / HB Fuller Adhesives LLC
AKZO NOBEL SURFACE CHEMISTRY LLC
EQUISTAR CHEMICALS LP
Scotts Hyponex
Morton Grove Pharmaceuticals Inc
Avon Products Inc
Regis Technologies Inc
Multi-Pack Solutions LLC
PPG Mt Vernon
BP Chemicals/INEOS USA LLC
DSM Nutritional Products Inc
Nalco Co
Gateway FS Inc
Gateway FS Inc
Crest Industries

6131 Red Oakwood Rd
7847 W 47th St
9918 N Alpine Rd
395 Bissell St
100 S Park Rd Rural
15600 Bruns Rd
8220 West Route 24
8300 W Route 24
8310 W Rte 24
8316 W Route 24
1400 N State St
5307 Meadowland Pkwy
1801 Broadway
Old Route 40 W
21625 Oak Street
21901 Central Ave
21901 South Central
8201 West 47th St
8400 Joliet Rd
9550 W 55th St
3900 Dayton St
2020 N Ruby St
2525 Armitage Ave
1989 OLD NAPLES RD
S Washington St
2768 US 45 N
14461 S Waverly Ave
5400 23rd Avenue
2000 Aucutt Rd
2200 Rochester Dr
6350 E COLLINS RD
6352 E Collins Rd
7440 W Dupont Rd
8005 TABLER RD
8805 TABLER RD
9349 Garden Plain Rd
6451 W Main St
6901 Golf Rd
8210 Austin Ave
1804 W Central Road
1700 S Shawnee St
150 W WARRENVILLE RD
150 W Warrenville Rd
1601 Diehl Rd
1351 W St Louis Rd
680 N Mill St
1066 Industry Rd

Long Grove	Lake County	IL	60047-
Lyons	Cook County	IL	60534-
Machesney Park	Winnebago County	IL	61115-
Madison	Madison County	IL	62060-
Manhattan	Will County	IL	60442-
Manhattan	Will County	IL	60442-0007
Mapleton	Peoria County	IL	61547-
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Marengo	McHenry County	IL	60152-
Marion	Williamson County	IL	62959-
Marseilles	La Salle County	IL	61341-
Martinsville	Clark County	IL	62442-
Matteson	Cook County	IL	60443-
Matteson	Cook County	IL	60443-2800
Matteson	Cook County	IL	60443-
McCook	Cook County	IL	60525-
McCook	Cook County	IL	60525-
McCook	Cook County	IL	60525-
McHenry	McHenry County	IL	60050-
Melrose Park	Cook County	IL	60160-
Melrose Park	Cook County	IL	60160-
MEREDOSIA	Morgan County	IL	62665-
Meredosia	Morgan County	IL	62665-
Metropolis	Massac County	IL	62960-
Midlothian	Cook County	IL	60445-2939
Moline	Rock Island County	IL	61265-
Montgomery	Kane County	IL	60538-
Montgomery	Kane County	IL	60538-
MORRIS	Grundy County	IL	60450-
Morris	Grundy County	IL	60450-
Morris	Grundy County	IL	60450-8375
MORRIS	Grundy County	IL	60450-
MORRIS	Grundy County	IL	60450-
Morrison	Whiteside County	IL	61270-
Morton Grove	Cook County	IL	60053-
Morton Grove	Cook County	IL	60053-
Morton Grove	Cook County	IL	60053-
Mount Prospect	Cook County	IL	60056-
Mount Vernon	Jefferson County	IL	62864-
Naperville	DuPage County	IL	60563-
Naperville	DuPage County	IL	60563-
Naperville	DuPage County	IL	60563-1198
Nashville	Washington County	IL	62263-
Nashville	Washington County	IL	62263-
New Lenox	Will County	IL	60451-

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Hydromet Environmental Recovery Ltd
BN National Trail Biodiesel LLC
MPC Products Corp
AbbVie Inc
AbbVie Inc
AbbVie Inc
Abbott Laboratories
Emco Chemical Distributors Inc
Gillette Co
Frigid Fluid Co
Sun Chemical, GPI DIV- Northlake
Blistex Inc
Adheron Coatings Corporation
HA International LLC
Cristal Metals Inc-Titanium Powder Plant
SABIC Innovative Plastics US LLC
HB Fuller Construction Products Inc
Lincolnland Agri-Energy LLC
ABITEC CORP
Mobil Pipe Line Co
CLEAN HARBORS PECATONICA LLC
Praxair, Inc
Linde LLC
Aventine Renewable Energy, Inc.
Continental Carbonic Products Inc
MacDermid Agricultural Solutions Inc
Archer Daniels Midland Co
PMP Fermentation Products Inc
Flint Hills Resources Peru LLC
Nanochem Solutions Inc
Sandstrom Products Co
Prince Minerals Inc
Combe Laboratories Inc
Conair Corp
Leica Biosystems Richmond Inc
ROHM & HAAS CHEMICALS LLC (formerly Morton International Inc. - Ringwood Plant; Dow Chemical)
FBC Industries
CHS-Rochelle
Coated Sand Solutions LLC
Apollo Colors Inc
Engineered Polymer Solutions Inc
EPS D/B/A Valspar
Buckeye Terminals LLC
Pierce Biotechnology Inc
Sherwin Williams Co
Testor Corp
Prochem Inc International

2475 US Hwy 36
8810 Commercial Ave
5600 W Jarvis Ave
1 N Waukegan Rd
1401 Sheridan Rd
1401 Sheridan Rd
200 Abbott Park Rd
2100 Commonwealth Ave
3500 W 16th St
11631 W Grand Ave
135 West Lake Street
1800 Swift Dr
16420 Kilbourne Ave
1449 Devil's Backbone Rd
1501 Titanium Dr
2148 N 2753rd Rd
315 S Hicks Rd
10406 N 1725th St
1800 S MAIN ST
8328 US Highway 51
6125 N PECATONICA RD
1225 S Front St
125 Distillery Rd
1300 S Second St
140 Distillery Rd
2320 Lakecrest Dr
1 Edmund St
900 NE Adams St
501 Brunner St
5350 Donlar Ave
224 S Main St
229 Radio Rd
200 Shellhouse Dr
205 Shelhouse Dr
5205 Rte 12
5005 BARNARD MILL RD
110 E Ave H
1900 Steward Rd
1951 Steward Rd
1550 Mound Rd
1215 Nelson Blvd
1215 Nelson Blvd
1511 S Meridian Rd
3747 N Meridian Rd
4472 Technology Dr
615 Buckbee St
826 Roosevelt Rd

Newman	Douglas County	IL	61942-
Newton	Jasper County	IL	62448-
Niles	Cook County	IL	60714-
North Chicago	Lake County	IL	60064-
North Chicago	Lake County	IL	60064-
North Chicago	Lake County	IL	60064-
North Chicago	Lake County	IL	60064-6212
North Chicago	Lake County	IL	60064-
North Chicago	Lake County	IL	60064-1513
Northlake	Cook County	IL	60164-
Northlake	Cook County	IL	60164-
Oak Brook	DuPage County	IL	60523-
Oak Forest		IL	60452-
Oregon	Ogle County	IL	61061-
Ottawa	La Salle County	IL	61350-
Ottawa	La Salle County	IL	61350-
Palatine	Cook County	IL	60067-
Palestine	Crawford County	IL	62451-
PARIS		IL	61944-
Patoka	Marion County	IL	62875-
PECATONICA	Winnebago County	IL	61063-
Pekin	Tazewell County	IL	61554-
Pekin	Tazewell County	IL	61554-
Pekin	Tazewell County	IL	61554-0010
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Pekin	Tazewell County	IL	61554-
Peoria	Peoria County	IL	61602-
Peoria	Peoria County	IL	61603-
Peru	La Salle County	IL	61354-3635
Peru	La Salle County	IL	61354-
Port Byron	Rock Island County	IL	61275-
Quincy	Adams County	IL	62305-
Rantoul	Champaign County	IL	61866-
Rantoul	Champaign County	IL	61866-
Richmond	McHenry County	IL	60071-
RINGWOOD	McHenry County	IL	60072-
Rochelle	Ogle County	IL	61068-
Rochelle	Ogle County	IL	61068-
Rochelle	Ogle County	IL	61068-
Rockdale	Will County	IL	60436-2800
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Rockford	Winnebago County	IL	61104-
Rockford	Winnebago County	IL	61102-
Rockford	Winnebago County	IL	61110-
Rockford	Winnebago County	IL	61109-
Rockford	Winnebago County	IL	61104-
Rockford	Winnebago County	IL	61109-

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Fujifilm Hunt Chemicals USA Inc
Heritage Remediation/Engineering Inc
GEA Farm Technologies Inc
Linde Gas North America LLC
Clarke Mosquito Control
CONOCOPHILLIPS CO
Air Liquide America Corp
Sun Chemical Corp
IGM Resins
Midwest Powder Coatings Inc
Stellar Mfg Co
Center Ethanol Co
Eastman Chemical Company (formerly Solutia Inc., W.G. Krummrich Plant)
Solutia Inc
Afton Chemical (formerly Ethyl Petroleum Additives Inc.)
Occidental Chemical Corp Sauget Plant
Powerlab Inc
Clarke Mosquito Control
Commercial Cleanser Co
Martin Operating Partnership LP
REG Seneca LLC
Nova-Kem LLC
FC Skokie LLC
Resinoid Engineering Corp
Gibraltar Chemical Works Inc
Gurtler Industries Inc
Accurate Dispersions
Midwest Biodiesel Products LLC
Solomon Grind-Chem Service Inc
Praxair Inc
Marathon Pipe Line LLC
Finishes Unlimited Inc
Williams-Hayward Protective Coatings Inc
Williams-Hayward Protective Coatings Inc
Seymour of Sycamore Inc
Equistar Chemicals LP
Cabot Corp
CRONUS CHEMICALS LLC
Air Products And Chemicals Inc
Solvay USA Inc
PQ Corp
Utica Silicates Plt
Marathon Pipe Line LLC
Graphic Chemical & Ink Co
Gateway FS Inc
Dexter Corp/AKZO NOBEL AEROSPACE COATINGS INC
Pfanstiehl Inc

900 Carnegie St
1319 Marquette Dr
1354 Enterprise Dr
810 E 135th St
159 N Garden Ave
900 S CENTRAL AVE
Madison Ave and Hedge Rd
2445 Production Dr
3705 Stern Ave
3865 Swenson Ave
1647 Sauget Business Blvd
231 Monsanto Ave
500 Monsanto Ave
500 Monsanto Dr
501 MONSANTO AVE
520 Monsanto Ave.
Powerlab Rd
610 Lunt Ave
3920 Wesley Terrace
580 E Shipyard Rd
614 Shipyard Rd
16161 6th St
4901 Searle Pkwy
7557 NSt Louis Ave
114 E 168th St
15475 LaSalle St
192 W 155th St
7350 St Rte 111
4050 Color Plant Rd
121 Wallace St
Washington St
482 Wheeler Rd
7400 W Archer Ave
7425 W 59th St
917 Crosby Ave
625 E US Highway 36
700 E US Highway 36
765 E US HWY 36
Rte 36 W Box 188
24601 Governors Hwy
340 E Grove St
340A E Grove St
8762 US Hwy 51
728 N Yale Ave
420 S Broadway
1 East Water Street
1219 Glen Rock Ave

Rolling Meadows	Cook County	IL	60008-1037
Romeoville	Will County	IL	60446-
Romeoville	Will County	IL	60446-
Romeoville	Will County	IL	60446-
Roselle	DuPage County	IL	60172-
ROXANA	Madison County	IL	62084-
Roxana	Madison County	IL	62084-0067
Saint Charles	Kane County	IL	60174-
Saint Charles	Kane County	IL	60174-
Saint Charles	Kane County	IL	60174-
Sauget	St. Clair County	IL	62206-
Sauget	St. Clair County	IL	62201-
Sauget	St. Clair County	IL	62206-
Sauget	St. Clair County	IL	62206-1198
SAUGET	St. Clair County	IL	62206-
Sauget	St. Clair County	IL	62206-
Savanna	Carroll County	IL	61074-
Schaumburg	Cook County	IL	60193-
Schiller Park	Cook County	IL	60176-2132
Seneca	La Salle County	IL	61360-
Seneca	La Salle County	IL	61360-
Seward	Winnebago County	IL	61077-
Skokie	Cook County	IL	60077-
Skokie	Cook County	IL	60076-
South Holland	Cook County	IL	60473-
South Holland	Cook County	IL	60473-1220
South Holland	Cook County	IL	60473-
South Roxana	Madison County	IL	62087-
Springfield	Sangamon County	IL	62702-
Sterling	Whiteside County	IL	61081-
Stoy	Crawford County	IL	62464-
Sugar Grove	Kane County	IL	60554-
Summit	Cook County	IL	60501-
Summit	Cook County	IL	60501-
Sycamore	DeKalb County	IL	60178-
Tuscola	Douglas County	IL	61953-
Tuscola	Douglas County	IL	61953-9643
TUSCOLA	Douglas County	IL	
Tuscola	Douglas County	IL	61953-
University Park	Will County	IL	60466-
Utica	La Salle County	IL	61373-
Utica	La Salle County	IL	61373-
Vernon	Marion County	IL	62875-
Villa Park	DuPage County	IL	60181-1606
Waltonville	Jefferson County	IL	62894-
Waukegan	Lake County	IL	60085-
Waukegan	Lake County	IL	60085-

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Coral Chemical Co
Abbott Laboratories
Bulk Molding Compounds Inc
INX International Ink Co
Siegwerk EIC LLC
Mapei Corp
EPS D/B/A Valspar
Sunnyside Corp
Slide Products Inc
Penray Companies Inc
Jones Chemicals Inc
North American Systems House
Dyno Nobel inc
Toyo Ink America LLC
BP Amoco Chemicals
Gateway FS Inc
ECP Inc
Champion Packaging & Dist Inc
Catalent Pharma Solutions
FMC Corp
Coral Chemical (formerly AKZO NOBEL COATINGS INC.)
Ivanhoe Industries Inc
LIME-O-SOL COMPANY
Green Plains Bluffton LLC
PVS Steel Services Inc
PQ CORP
LOUIS DREYFUS AGRICULTURAL INDUSTRIES LLC
ELI LILLY AND COMPANY-CLINTON LABS
RECLAIMED ENERGY DIVISON OF SUPERIOR OIL CO., INC.
DARAMIC, LLC
CRANE DIV, NAVAL SURFACE WARFARE CTR (NSWC CRANE)
PRAXAIR INC
PRAXAIR INC
W R GRACE & CO CONN
ACCUBUILT, INC.
APG Inc / KIK Custom Products Indiana P
EPS Valspar (formerly Lilly Industries (USA), Inc.)
RED SPOT PAINT & VARNISH COMPANY, INC.
Valspar Coatings - Ft. Wayne
Essex Group Incorporated
PRAXAIR INC
PVS Steel Services Incorporated
ENBRIDGE ENERGY HARTSDALE GRIFFITH TERM
CARGILL, INC.
Eco Services Corporation
Ferro Corporation
WOLF LAKE TERMINALS, INC.

135 Lebaron St
3561 Burwood Dr
1600 Powis Ct
1860 Western Dr
450 Wegner Dr
530 Industrial Dr
1191 S Wheeling Rd
225 Carpenter Ave
430 S Wheeling Rd
440 Denniston Ct
10100 S Archer Ave
901 E Kankakee River Dr
5570 State Route 3 N
1225 Michael Dr
335 SOUTH OLD SAINT LOUIS ROAD
5815 E Il Hwy 15
11210 Katherine's Crossing
1840 Internationale Pkwy
2200 Lake Shore Dr
Highway 17 E
1915 INDUSTRIAL AVENUE
3333 20th St
101 S PARKER DR
1441 S Adams Street
1111 N SR 149
1101 Quartz Rd
7344 SR 15 S
10500 S SR 63
1500 WESTERN AVE
3430 CLINE RD NW
300 US HWY 361
2551 Dickey Rd
4400 Kennedy Ave
5215 Kennedy Ave
2700 ADA DR
2730 Middlebury St
28335 Clay Street
1016 E COLUMBIA ST
202 Jacobs Ave.
1601 WALL ST
Clark St & Dean Mitchell Rd
2001 E CR 700 N
1500 W Main St
1100 INDIANAPOLIS BLVD
2000 Michigan St
3000 SHEFFIELD AVE
3200 SHEFFIELD AVE

Waukegan	Lake County	IL	60085-
Waukegan	Lake County	IL	60085-
West Chicago	DuPage County	IL	60185-1016
West Chicago	DuPage County	IL	60185-
West Chicago	DuPage County	IL	60185-
West Chicago	DuPage County	IL	60185-
Wheeling	Cook County	IL	60090-
Wheeling	Cook County	IL	60090-6009
Wheeling	Cook County	IL	60090-
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Willow Springs	Cook County	IL	60480-
Wilmington	Will County	IL	60481-
Wolf Lake	Union County	IL	62998-
Wood Dale	DuPage County	IL	60191-
Wood River	Madison County	IL	62095-
Woodlawn	Jefferson County	IL	62898-
Woodridge	Will County	IL	60517-
Woodridge	DuPage County	IL	60517-
Woodstock	McHenry County	IL	60098-
Wyoming	Stark County	IL	61491-
ZION	Lake County	IL	60099-
Zion	Lake County	IL	60099-
ASHLEY		IN	46705-
Bluffton	Wells County	IN	46714-
Burns Harbor	Porter County	IN	46304-
Clarksville	Clark County	IN	47129-
CLAYPOOL	Kosciusko County	IN	46510-
CLINTON		IN	
CONNERSVILLE	Fayette County	IN	47331-
CORYDON	Harrison County	IN	47112-
CRANE	Martin County	IN	47522-
East Chicago	Lake County	IN	46312-
East Chicago	Lake County	IN	46312-
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ELKHART	Elkhart County	IN	46514-
Elkhart	Elkhart County	IN	46516-
Elkhart	Elkhart County	IN	46517-
EVANSVILLE	Vanderburgh County	IN	47711-
Fort Wayne	ALLEN	IN	46808-
Fort Wayne	ALLEN	IN	46802-
Gary	Lake County	IN	46406-
Grandview	Spencer County	IN	47615-
Griffith	Lake County	IN	46319-
HAMMOND	Lake County	IN	46320-
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VERTELLUS INTEGRATED PYRIDINES LLC
Micronutrients, Division of Heritage Technologies, LLC
ELI LILLY & CO LILLY TECH CTR
IVC INDUSTRIAL COATINGS, INC.
BRULIN CORP
EPS Valspar (formerly Lilly Industries (USA), Inc.)
SUN CHEMICAL GPI
NCH CORP MOHAWK LABS DIV
NATIONAL PRODUCTS LLC
EVONIK CORPORATION - TIPPECANOE LABORATORIES
TATE & LYLE INGREDIENTS AMERICAS LLC (NORTH PLANT)
Valero Renewable Fuels Company LLC (DBA
The Andersons Clymers Ethanol LLC
PRINOVA SOLUTIONS, LLC
CRITERION CATALYST & TECHNOLOGIES L P
DECO-CHEM INC
SABIC INNOVATIVE PLASTICS MT VERNON, LLC
VALERO RENEWABLE FUELS CO LLC DBA VALERO MT VERNONT PLANT
ABENGOA BIOENERGY OF INDIANA
Flint Ink Corporation
ALCOA - WARRICK OPERATIONS
Industrial Dielectrics Inc dba IDI Comp
RAYDAR & ASSOCIATES
ADESA INDIANAPOLIS, LLC
A SCHULMAN INCORPORATED
PVS Steel Services Inc
MID-STATES RUBBER PRODUCTS, INC.
TOYOTA MOTOR MANUFACTURING, INDIANA, INC.
INDIANA GASIFICATION LLC
CCL DESIGN
ECKART AMERICA CORPORATION
Kremers Urban Pharmaceuticals Inc
Molding Products LLC
ROYAL ADHESIVES AND SEALANTS, L.L.C.
NOBLE AMERICAS SOUTH BEND ETHANOL, LLC
Hydrite Chemical Co.
Cathay Pigments (USA), Inc.
Patrick Industries Incorporated
FLINT GROUP NORTH AMERICA CORPORATION
Da Lite Screen Company LLC
GRAIN PROCESSING CORPORATION
sgSolutions LLC
BP PRODUCTS NORTH AMERICA INC - WHITING BUSINESS UNIT
SHERWIN-WILLIAMS COMPANY (THE)
IACX Energy - Burdett Station
Western Plains Energy
ASH GROVE CEMENT COMPANY

1500 S TIBBS AVE
1550 Research Way
1555 S Harding St
2245-50 VALLEY AVE
2920 DR. ANDREW J. BROWN
546 W Abbott Street
7427 COMPANY DRIVE
8401 E. 33RD STREET
1ST RD & KINGSBURY IND PK B
1650 LILLY RD
2245 SAGAMORE PKWY N
203 W CR 1100 N
2278 W CR 300 S
1700 E US HWY 12
1800 E US Hwy 12
3502 N. HOME ST.
1 LEXAN LN
7201 PORT RD
8999 W Franklin Rd
800 Industrial Blvd
SR 66 & SR 61
407 S 7th St
15484 N 1350 E
2950 E MAIN ST
1301 N FLORA ST
6300 US Hwy 12
1230 S RACE ST
4000 TULIP TREE DR
CR 200 N & BASE RD
650 W 67TH AVE
650 W 67TH AVE
1101 C Ave W
1545 S Olive St
2001 W WASHINGTON ST
3201 W CALVERT ST
1330 Lockport Rd.
4901 E Evans Ave
2466 N CR 200 W
3025 W OLD RD 30
3100 N Detroit St
1443 S 300 W
444 W Sandford Ave
2815 INDIANAPOLIS BLVD
630 E. 13TH STREET
S14-T21S-R21W
S2-T11S-R31W
1801 N. SANTA FE

INDIANAPOLIS	Marion County	IN	46241-
Indianapolis	Marion County	IN	46231-
Indianapolis	Marion County	IN	46221-
INDIANAPOLIS	Marion County	IN	46218-
INDIANAPOLIS	Marion County	IN	46205-
Indianapolis	Marion County	IN	46225-
INDIANAPOLIS	Marion County	IN	46237-
INDIANAPOLIS	Marion County	IN	46226-
KINGSBURY		IN	46345-
LAFAYETTE	Tippecanoe County	IN	47909-
LAFAYETTE	Tippecanoe County	IN	47904-
Linden	Montgomery County	IN	47955-
Logansport	Cass County	IN	46947-
MICHIGAN CITY	La Porte County	IN	46360-
Michigan City	La Porte County	IN	46360-
MISHAWAKA	ST JOSEPH	IN	46545-
MOUNT VERNON	Posey County	IN	47620-
MOUNT VERNON	Posey County	IN	47620-
Mount Vernon	Posey County	IN	47620-
New Albany	FLOYD	IN	47150-
NEWBURGH	Warrick County	IN	47629-
Noblesville	Hamilton County	IN	46061-
ODON		IN	47562-
PLAINFIELD		IN	46168-
PLYMOUTH		IN	46563-
Portage	Porter County	IN	46368-
PRINCETON	Gibson County	IN	47670-3034
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ROCKPORT		IN	
SCHERERVILLE	Lake County	IN	46375-
SCHERERVILLE	Lake County	IN	
Seymour	Jackson County	IN	47274-
South Bend	St. Joseph County	IN	46619-
SOUTH BEND	St. Joseph County	IN	46628-
SOUTH BEND	St. Joseph County	IN	46613-
Terre Haute	Vigo County	IN	47802-3106
Valparaiso	Porter County	IN	46383-
Warsaw	Kosciusko County	IN	46580-
WARSAW	Kosciusko County	IN	46580-
Warsaw	Kosciusko County	IN	46582-
WASHINGTON	DAVIESS	IN	
West Terre Haute	Vigo County	IN	47885-
WHITING	Lake County	IN	46394-
ANDOVER	Butler County	KS	67002-
BURDETT	Hodgeman County	KS	67523-
CAMPUS	Gove County	KS	67752-
CHANUTE	Neosho County	KS	66720-

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Royal Oak Enterprises
COFFEYVILLE RESOURCES REFIN. & MKTNG.,LL
Tessenderlo Kerley
COFFEYVILLE RESOURCES NITROGEN FERT.
ABENGOA BIOENERGY, LLC
Koch Fertilizer Dodge City
HOLLYFRONTIER EL DORADO REFINING LLC
Holly Energy Partners-El Dorado Tank Farm (crude stor)
EVONIK-JAYHAWK FINE CHEMICALS
ALLCO CHEMICAL CORPORATION (GALENA)
Bonanza Bioenergy
East Kansas Agri-Energy
EVONIK CORP (formerly Air Products Manufacturing - Wichita)
Abengoa Bioenergy Biomass of Kansas, LLC
ABENGOA BIOENERGY HYBRID OF KANSAS
BP PIPELINES (NORTH AMERICA), INC.
Cargill (Salt Div.) - Hutchinson
CHS MCPHERSON REFINERY INC.
PQ Corp.
VVF Kansas Services
Procter & Gamble
Z W Tech
Harcros Chemicals - Kansas City
Royal Adhesives and Sealants
KANSAS CORRECTIONAL INDUSTRIES
ICL Performance Products
Chemtrade Logistics
Arkalon Ethanol
Kansas Ethanol
Tessenderlo Kerley Inc
Hospira
ONEOK Hydrocarbon - McPherson Butane Isom. (flare)
Airosol Co.
SPX COOLING TECHNOLOGIES, INC.
Prairie Horizon Agri-Energy
Pratt Energy
US Energy Partners (White Energy)
McShares
Nesika Energy (ethanol plant)
Nazdar
JACAM MANUFACTURING 2013, LLC
Innovia Films
R & B AIRCRAFT
Columbian Chemicals
WILKO PAINT, INC.
INVISTA S.A.R.L.
ATOFINA CHEMICALS, INC.

812 NORTH 11TH HWY 59
400 NORTH LINDEN
515 LAUREL STREET
701 E. MARTIN
523 E. UNION AVENUE
11559 E. US HWY 50
1401 S. DOUGLAS ROAD
1480 PURITY SPRINGS SW
8545 SE JAYHAWK DRIVE
P.O. Box 247
2810 EAST US HIGHWAY 50
1304 SOUTH MAIN STREET
6601 South Ridge Road
1043 Road P
S18-T33S-R37W
TANK FARM ROAD NEAR HWY 169
609 E. AVE. G
1391 IRON HORSE ROAD
1700 KANSAS AVE.
1705 KANSAS AVENUE
1900 KANSAS AVE.
3901 FAIRBANKS AVE
5200 SPEAKER ROAD
5200 SPEAKER ROAD
301 E KANSAS
440 N. 9TH STREET
440-B N. 9TH
8664 COUNTY ROAD P
1630 AVENUE Q
1360 Iron Horse Rd.
1776 Centennial Dr
462 HWY 56 S23-T19S-R5W
1206 ILLINOIS STREET
1200 W. MARLEY ROAD
1664 E. 100 ROAD
10333 NE 30TH STREET
1224 E. 15TH STREET
1835 E. NORTH STREET
1020 70TH ROAD S13-T3S-R5W
8501 HEDGE LANE TERRACE
P.O. BOX 96
6000 S.E. 2ND ST.
3600 SARDOU
S7-T29S-R35W
2727 OHIO STREET P.O. BOX 4089
4123 EAST 37TH STREET NORTH
6040 S. RIDGE ROAD

CHETOPA	Labette County	KS	67336-
COFFEYVILLE	Montgomery County	KS	67337-
COFFEYVILLE	Montgomery County	KS	67337-
COFFEYVILLE	Montgomery County	KS	67337-
COLWICH		KS	
DODGE CITY	Ford County	KS	67801-
EL DORADO	Butler County	KS	67042-
EL DORADO	Butler County	KS	67042-
GALENA	Cherokee County	KS	66739-
Galena	Cherokee County	KS	66739-
GARDEN CITY	Finney County	KS	67846-
GARNETT	Anderson County	KS	66032-
Haysville	Sedgwick County	KS	67060-
Hugoton	Stevens County	KS	67951-
HUGOTON	Stevens County	KS	
HUMBOLDT		KS	
HUTCHINSON	Reno County	KS	67501-0000
KANSAS		KS	
KANSAS CITY	Wyandotte County	KS	66105-
KANSAS CITY	Wyandotte County	KS	66105-
KANSAS CITY	Wyandotte County	KS	66105-
KANSAS CITY	Wyandotte County	KS	66106-1247
KANSAS CITY	Wyandotte County	KS	66110-
KANSAS CITY	Wyandotte County	KS	66106-
LANSING	Leavenworth County	KS	66043-
LAWRENCE	Douglas County	KS	66044-5424
LAWRENCE	Douglas County	KS	66044-
LIBERAL	Seward County	KS	67901-
LYONS	Rice County	KS	67554-
McPherson	McPherson County	KS	67460-0883
McPherson	McPherson County	KS	67460-
MCPHERSON	McPherson County	KS	67460-
NEODESHA	Wilson County	KS	66757-
OLATHE	Johnson County	KS	66061-
PHILLIPSBURG	Phillips County	KS	67661-
PRATT	Pratt County	KS	67124-
RUSSELL	Russell County	KS	67665-
SALINA	Saline County	KS	67401-
SCANDIA	Republic County	KS	66966-
SHAWNEE	Johnson County	KS	66227-3290
STERLING	RICE	KS	67579-
TECUMSEH	Shawnee County	KS	66542-
TOPEKA		KS	66616-
ULYSSES	Grant County	KS	67880-
WICHITA	Sedgwick County	KS	67219-
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1379	110000378840	336111	7203211	
1380	110063967355	325199	16830711	
1381	110042083250	325920	10684811	
1382	110009957430	32592	7367411	
1383	110067040696	332993		NEIKY1041
1384	110000380926	322121	9619211	
1385	110000591388	325211	7366011	
1386	110001375351	325211	6111111	

OCCIDENTAL CHEMICAL CORP (formerly OXYCHEM - WICHITA PLANT and BASIC CHEMICALS COMPANY, LLC)
Cowboy Charcoal USA
Clopay Co
Daicel Safety Technologies America LLC
Engineered Polymer Solutions Inc - Valspar Coatings
Sun Products Corp
MONUMENT CHEMICAL KENTUCKY LLC
Kingsford Manufacturing Co
Westlake PVC Corp.
Cymetech Corporation
Lubrizol Advanced Materials Inc
WESTLAKE VINYLS INC
Carbide Industries LLC
Sekisui Specialty Chemicals America LLC
SEKISUI SPECIALTY CHEMICALS AMERICA LLC
AIR PRODUCTS & CHEMICALS
ARKEMA INC
ISP CHEMICALS INC.
Evonik Corporation
Estron Chemical Inc
WACKER CHEMICAL CORPORATION
PMC Organometallix Inc
DOW CORNING CORP
MARATHON PETROLEUM CO LLC - CATLETTSBURG REFINING
Calgon Carbon Corporation
Air Products & Chemicals Inc - Catlettsburg Hydrogen Plant
3M CYNTHIANA
Flint Group Pigments
Accumetric LLC - Packaging Plant
Dow Corning Corporation - Elizabethtown Plant
Cytech Products Inc
Flint Group North America Corp
Loreal USA
ARISTECH SURFACES LLC
Ticona Polymers Inc.
Camco Chemical Co
A O Smith Corp
Interplastic Corp
COVALENCE SPECIALITY ADHESIVES LLC
TOYOTA MOTOR MANUFACTURING USA INC
Kelley Green Biofuel Kentucky LLC
Ensign-Bickford Aerospace & Defense Co
Dyno Nobel Inc
Ensign-Bickford Aerospace & Defense Co/Dyno Nobel Inc
DOMTAR PAPER CO LLC - HAWESVILLE OPERATIONS
Custom Resins Inc
Polymer Partners

6200 SOUTH RIDGE ROAD
3227 KY 90 W
531 E 4th St
720 Old Liberty Church Rd
347 Central Ave
385 Southwood Ct
2450 OLIN RD
9500 US 27 S
230 Johnson Riley Rd
2468 Industrial Pkwy
2468 Industrial Pkwy
2468 INDUSTRIAL PKWY
3204 Industrial Pkwy
408 N Main St
408 N MAIN ST
412 N MAIN ST
4444 INDUSTRIAL PKWY
455 N MAIN ST
5150 Gilbertsville Hwy
807 N Main St
854 N MAIN ST
2316 Highland Ave
4770 US 42 E
11631 US 23
15024 Old US 23 S
US 23
1308 NEW LAIR RD
305 Ring Rd
350 Ring Rd
760 Hodgenville Rd
906 Peterson Dr
1835 Airport Exchange Blvd
7080 New Buffington Rd
7350 EMPIRE DR
8040 Dixie Hwy
8150 Holton Dr
8160 Holton Rd
3535 Latonia Ave
2320 BOWLING GREEN RD
1001 CHERRY BLOSSOM WAY
5100 Greenhaven Ln
Hwy 175
KY 175
STATE RT 175 PO BOX 219
58 WESCOR RD
1421 KY 136 W
1450 Commonwealth Dr

WICHITA	Sedgwick County	KS	67215-
Albany	Clinton County	KY	42602-
Augusta	Bracken County	KY	41002-
Beaver Dam	Ohio County	KY	42320-
Bowling Green	Warren County	KY	42101-
Bowling Green	Warren County	KY	42101-
BRANDENBURG	Meade County	KY	40229-
Burnside	Pulaski County	KY	42519-
Calvert City	Marshall County	KY	42029-
Calvert City	Marshall County	KY	42029-
Calvert City	Marshall County	KY	42029-
CALVERT CITY	Marshall County	KY	42029-
Calvert City	Marshall County	KY	42029-
Calvert City	Marshall County	KY	42029-8942
CALVERT CITY	Marshall County	KY	42029-
CALVERT CITY	Marshall County	KY	42029-
CALVERT CITY	Marshall County	KY	42029-
CALVERT CITY	Marshall County	KY	42029-
Calvert City	Marshall County	KY	42029-
Calvert City	Marshall County	KY	42029-
CALVERT CITY	Marshall County	KY	42029-
Carrollton	Carroll County	KY	41008-
CARROLLTON	Carroll County	KY	
CATLETTSBURG	Boyd County	KY	41129-
Catlettsburg	Boyd County	KY	41129-
Catlettsburg	Boyd County	KY	41129-
CYNTHIANA	Harrison County	KY	41031-
Elizabethtown	Hardin County	KY	42701-
Elizabethtown	Hardin County	KY	42701-
Elizabethtown	Hardin County	KY	42701-
Elizabethtown	Hardin County	KY	42701-
Erlanger	Boone County	KY	41018-
Florence	Kenton County	KY	41042-
FLORENCE	Boone County	KY	41042-
Florence	Boone County	KY	41042-
Florence	Boone County	KY	41042-
Florence	Kenton County	KY	41042-
Fort Wright	Kenton County	KY	41015-0159
FRANKLIN		KY	42134-
GEORGETOWN (SCOTT)	Scott County	KY	40324-
Goshen	Oldham County	KY	40026-
Graham	Muhlenberg County	KY	42344-
Graham	Muhlenberg County	KY	42344-
GRAHAM	Muhlenberg County	KY	42344-
HAWESVILLE	Hancock County	KY	42348-
Henderson	Henderson County	KY	42420-
Henderson	Henderson County	KY	42420-

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37.689510	-85.914860
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38.974400	-84.619100
38.974620	-84.610390
38.977220	-84.610550
39.041940	-84.514720
36.755880	-86.576490
38.260350	-84.534367
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1431	110013838972	325314	5164711	
1432	110041020310	325211	6127511	
1433	110000380212	325998	5606311	

TransMontaigne Operating Co LP - Henderson Terminal
Teknor Color Co
Shamrock Technologies Inc
Cumberland Products Inc
Sun Chemical Gpi
Commonwealth Agri-Energy LLC
Amfine Chemical Corp
Magni Industries
Fluor Federal Services Inc - Paducah Gaseous Diffusion Plant
Babcock & Wilcox Conversion Services LLC
Clariant Corporation, Louisville West Plant
FORD MOTOR CO LOUISVILLE ASSEMBLY PLANT
FORD MOTOR CO KY TRUCK PLANT
BASF Corporation
Courtaulds Coatings Plant One (Porter Paints) (formerly PPG)
Recast Energy Louisville, LLC
ZEON CHEMICALS LP
LUBRIZOL ADVANCED MATERIALS, INC
CHEMOURS, CO.
E I du Pont de Nemours & Co.
E.I. DU PONT DE NEMOURS AND COMPANY
Rohm & Haas Kentucky Inc
Carbide Industries LLC
AMERICAN SYNTHETIC RUBBER CO
Akzo Nobel
Clariant Corporation, Louisville South Plant
Forth Technologies, Inc.
HEXION, INC.
Lexington Paint & Supply
Owensboro Grain Biodiesel LLC
DART POLYMER INC
DARAMIC LLC
Owensboro Specialty Polymers Inc.
Transmontaigne Operating Company LP - Paducah Terminal
H B Fuller Company
Easy Gardener Products Inc
Avantor Performance Materials Inc
INTERTAPE POLYMER GROUP
SHERWIN WILLIAMS AUTO FINISHES
Greenkote IPC Inc
Medimmune Distribution
Decoart Inc
Mastertaste - Hickory Specialities Inc
Kingsford Manufacturing Company
Warner Fertilizer Plant
Superior Vanceburg Composities LLC
MeadWestvaco Virginia Corp - Wickliffe Carbon Plant

2633 Sunset Ln
3058 Ohio Dr
5233 Industrial Park Dr
50 Commerce Pkwy
100 Sun Chemical Ct
4895 Pembroke Rd
6805 John River Rd
10250 Toebben Dr
5501 Hobbs Rd
5509 Hobbs Rd
1227 S 12TH ST
2000 FERN VALLEY ROAD
3001 CHAMBERLAIN LANE
3400 Bank Street
400 S. 13th Street
4014 BELLS LN
4100 BELLS LANE
4200 BELLS LANE
4200 CAMP GROUND RD
4200 CAMP GROUND RD
4250 CAMP GROUND RD
4300 CAMP GROUND RD
4400 BELLS LN
4500 CAMP GROUND RD
4730 CRITTENDEN DRIVE
4900 CRITTENDEN DR
600 BERGMAN ST
6200 CAMPGROUND ROAD
103 Park Central Ct
1145 Ewing Rd
2400 HARBOR RD
5525 KY 2830
5529 US 60 E
1350 S 3rd St
5000 Charter Oak Dr
1750 17th St
7001 Martin Luther King Jr Blvd
2000 ENTERPRISE DR
395 Boggs Lane South/P.O. Box 800
300 Isaac Shelby Dr
355 Omicron Ct
Jct of US 27 & US 150
5124 Summer Shade
5126 Summer Shade Rd
2010 Edmonton Rd
294 Industrial Rd
2025 Beech Grove Rd

Henderson	Henderson County	KY	42420-
Henderson	Henderson County	KY	42420-
Henderson	Henderson County	KY	42420-
Hodgenville	Larue County	KY	42748-
Hopkinsville	Christian County	KY	42240-
Hopkinsville	Christian County	KY	42241-
Hopkinsville	Christian County	KY	42240-
Independence	Boone County	KY	41051-
Kevil	McCracken County	KY	42053-
Kevil	McCracken County	KY	42053-
LOUISVILLE	Jefferson County	KY	40210-1525
LOUISVILLE	Jefferson County	KY	40213-3555
LOUISVILLE	Jefferson County	KY	40241-1905
Louisville	Jefferson County	KY	40212-
Louisville	Jefferson County	KY	40203-
LOUISVILLE	Jefferson County	KY	40211-2125
LOUISVILLE	Jefferson County	KY	40211-2147
LOUISVILLE	Jefferson County	KY	40211-2146
LOUISVILLE	Jefferson County	KY	
LOUISVILLE	Jefferson County	KY	40216-4602
LOUISVILLE	Jefferson County	KY	
LOUISVILLE	Jefferson County	KY	40216-4600
LOUISVILLE	Jefferson County	KY	40211-3727
LOUISVILLE	Jefferson County	KY	40216-4608
Louisville	Jefferson County	KY	40209-1971
LOUISVILLE	Jefferson County	KY	40209-2542
LOUISVILLE	Jefferson County	KY	40203-
LOUISVILLE	Jefferson County	KY	40216-2199
Nicholasville	Jessamine County	KY	40356-
Owensboro	Daviess County	KY	42302-
OWENSBORO	Daviess County	KY	42301-
OWENSBORO	Daviess County	KY	42303-
Owensboro	Daviess County	KY	42303-
Paducah	McCracken County	KY	42003-
Paducah	McCracken County	KY	42001-
Paris	Bourbon County	KY	40361-
Paris	Bourbon County	KY	40361-
RICHMOND	Madison County	KY	40475-
RICHMOND	Madison County	KY	40475-
Shelbyville	Shelby County	KY	40065-
Shepherdsville	Bullitt County	KY	40165-
Stanford	Lincoln County	KY	40484-
Summer Shade	Metcalfe County	KY	42166-
Summer Shade	Metcalfe County	KY	42166-
Tompkinsville	Monroe County	KY	42167-
Vanceburg	Lewis County	KY	41179-
Wickliffe	Ballard County	KY	42087-

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1434	110013843975	325412	8095711	
1435	110000379885	326140	6096711	
1436	110000379876	325180	6096411	
1437	110000449701	32518	7206311	
1438	110021120268	325211	7931011	
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1449	110003265779	424710	7227811	
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1451	110000449970	325110	7226611	
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CATALENT PHARMA SOLUTIONS LLC
PREGIS INNOVATIVE PACKAGING, INC
E I Dupont Inc
Sid Richardson Carbon Co - Addis Plant
Shintech Louisiana LLC - Addis Plant A
PQ Corp - Pineville Plant
EXXONMOBIL CHEMICAL CO - BATON ROUGE PLASTICS PLANT
DELTECH CORP - BATON ROUGE FACILITY
Honeywell UOP (formerly UOP LLC) - Baton Rouge Plant
EXXONMOBIL CHEMICAL CO - BATON ROUGE RESIN FINISHING PLANT
ExxonMobil Chemical Co - Baton Rouge Polyolefins Plant
ECO SERVICES OPERATIONS LLC - SULFURIC ACID PLANT / Solvay USA Inc - CathyVal Plant
ECO SERVICES OPERATIONS LLC - SULFURIC ACID PLANT / Solvay USA Inc - CathyVal Plant
East West Copolymer LLC
Interstate Logos LLC dba Lamar Graphics
Air Products & Chemicals Inc - Baton Rouge Hydrogen Plant - Steam Methane Reform
EXXONMOBIL CORP - BATON ROUGE TERMINAL no. 5005
EXXONMOBIL BATON ROUGE REFINERY
EXXONMOBIL BATON ROUGE CHEMICAL PLANT
Albemarle Corp - Process Development Center
HONEYWELL INTERNATIONAL INC - BATON ROUGE PLANT
FORMOSA PLASTICS CORP LOUISIANA
Chevron Oronite Co LLC - Oak Point Plant
PHILLIPS 66 CO - ALLIANCE REFINERY
Stolthaven New Orleans LLC - New Orleans Terminal
CCI PORT NICKEL LLC - PORT NICKEL
CALLON PETROLEUM OPERATING CO/BAYOU BOUILLION FIELD LOADING FACILITY
Tesoro Marine Services Cameron Base East Wharf
W R Grace & Co Conn - Grace Catalyst Technologies - Lake Charles Facility
TOTAL Petrochemicals & Refining USA Inc-Carville Polystyrene Plant
TOTAL PETROCHEMICALS & REFINING USA INC - COS-MAR CO
Cabot Corp - Canal Plant
Columbian Chemicals Co - North Bend Plant
EXXONMOBIL OIL CORP - CHALMETTE REFINING LLC
Air Products & Chemicals Inc - SMR Facility
OCCIDENTAL CHEMICAL CORP - CONVENT FACILITY
MOTIVA ENTERPRISES LLC - CONVENT REFINERY
ADA Carbon Solutions (Red River) LLC - Red River Plant
LOOP LLC - Deepwater Port Complex
E I Dupont de Nemours & Co Inc - Burnside Plant A H2SO4 Contact Facility
MeadWestvaco South Carolina LLC - DeRidder Plant
JELD-WEN
CF INDUSTRIES NITROGEN, LLC - DONALDSONVILLE NITROGEN COMPLEX
CF Industries Nitrogen, LLC - Donaldsonville Nitrogen Complex
CF Industries Inc - Donaldsonville Nitrogen Complex
Dow Chemical U S A Plaquemine Dock No 2 Hydroc
Pinnacle Polymers LLC - Polypropylene Manufacturing Plant

1100 ENTERPRISE DR
300 HARRIS RD
400 Harris Rd
5221 Sid Richardson Rd
9750 Hwy 1 S
4000 Pardue Rd
11675 SCOTLAND AVE
11911 SCENIC HWY
1200 Airline Hwy
12480 SCENIC HWY
12875 Scenic Hwy
1301 AIRLINE HWY
1301 AIRLINE HWY
1836 Shada Ave
1986 Beaumont Dr
2 GULF STATES UTILITY ROAD
3329 SCENIC HWY
4045 SCENIC HWY
4999 SCENIC HWY
Gulf States Utility Rd
LUPINE & ONTARIO
N END OF GULF STATES RD
10285 Hwy 23 S
15551 HWY 23
2444 English Turn Rd
3607 ENGLISH TURN RD
16 MILES E OF
127 WAKEFIELD RD
1800 Davison Rd
6225 Hwy 75
6325 HWY 75
272 Cabot Canal Plant Ln
370 Columbian Chemicals Ln
500 W ST BERNARD HWY
10759 Convent Way Rd
7377 HWY 3214
HWYS 44 & 70
201 Red River Mine Rd
224 E 101st Pl
3460 Hwy 44
400 Crosby Rd
465 TANNEHILL RD
39018 HWY 3089
39018 Hwy 3089
39139 Hwy 18 W
1 Pinnacle Ave

WINCHESTER	Clark County	KY	40391-
WURTLAND	Greenup County	KY	41144-
Wurtland	Greenup County	KY	41144-
Addis	West Baton Rouge Parish	LA	70710-
Addis	West Baton Rouge Parish	LA	70710-
Ball	Rapides Parish	LA	71405-
BATON ROUGE	East Baton Rouge Parish	LA	70807-
BATON ROUGE	East Baton Rouge Parish	LA	70807-
Baton Rouge	East Baton Rouge Parish	LA	70805-
BATON ROUGE	East Baton Rouge Parish	LA	70807-
Baton Rouge	East Baton Rouge Parish	LA	70807-
BATON ROUGE	East Baton Rouge Parish	LA	70805-
BATON ROUGE	East Baton Rouge Parish	LA	70805-
Baton Rouge	East Baton Rouge Parish	LA	70805-
Baton Rouge	East Baton Rouge Parish	LA	70806-
Baton Rouge	East Baton Rouge Parish	LA	70821-
BATON ROUGE	East Baton Rouge Parish	LA	70805-
BATON ROUGE	East Baton Rouge Parish	LA	70805-
BATON ROUGE	East Baton Rouge Parish	LA	70805-
Baton Rouge	East Baton Rouge Parish	LA	70805-
BATON ROUGE	East Baton Rouge Parish	LA	70821-
BATON ROUGE	East Baton Rouge Parish	LA	70805-
Belle Chasse	Plaquemines Parish	LA	70037-
BELLE CHASSE	Plaquemines Parish	LA	70037-
Braithwaite	Plaquemines Parish	LA	70040-
BRAITHWAITE	Plaquemines Parish	LA	
Breaux Bridge		LA	
CAMERON		LA	70631-
Carlyss	Calcasieu Parish	LA	70663-
Carville	Iberville Parish	LA	70721-
CARVILLE	Iberville Parish	LA	70721-
Centerville	St. Mary Parish	LA	70522-
Centerville	St. Mary Parish	LA	70522-
CHALMETTE	St. Bernard Parish	LA	70043-
Convent	St. James Parish	LA	70723-
CONVENT	St. James Parish	LA	70723-
CONVENT	St. James Parish	LA	70723-
Coushatta	Red River Parish	LA	71019-
Cut Off		LA	70345-
Darrow	Ascension Parish	LA	70725-
De Ridder	Beauregard Parish	LA	70634-
DODSON	Winn Parish	LA	71422-
DONALDSONVILLE	Ascension Parish	LA	70346-
Donaldsonville	Ascension Parish	LA	70346-
Donaldsonville	Ascension Parish	LA	70346-
ELIZA		LA	
Garyville	St. John the Baptist Parish	LA	70051-

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1525	110000597131	32519	7204811	

Nalco Co - Garyville Facility
AA Sulfuric Corp - Sulfuric Acid Plant
PCS Nitrogen Fertilizer LP - Geismar Agricultural Nitrogen & Phosphate Plant
Athlon Solutions LLC
KINDER MORGAN LIQUID TERMINALS LLC - GEISMAR METHANOL TERMINAL
WESTLAKE VINYLS CO LP
REG Geismar LLC
LION COPOLYMER GEISMAR LLC - GEISMAR FACILITY
Air Liquide Large Industries US LP - Geismar
BASF CORP - DNT PLANT
Air Products & Chemicals Inc - Geismar 2 - Syngas Separation Unit
METHANEX USA LLC - GEISMAR METHANOL PLANT
HEXION INC - FORMALDEHYDE PLANT
Williams Olefins LLC - Geismar Ethylene Plant
HONEYWELL INTERNATIONAL INC - GEISMAR PLANT
Honeywell International Inc - Geismar Plant
SHELL CHEMICAL LP - GEISMAR PLANT
Air Products & Chemicals Inc - Geismar 1 SMR Facility
IMTT - Geismar
OCCIDENTAL CHEMICAL CORPORATION - GEISMAR PLANT
BASF CORP - GEISMAR SITE
PRAXAIR INC - GEISMAR PLANT
Praxair Inc - Geismar Plant
RUBICON LLC - GEISMAR PLANT
Carline's Geismar Fleet Landing Wharf and Fleet
General Electric Co Geismar Wharf
Shell Pipeline Co LP - Gibson Station
Noranda Alumina LLC
Amerchol Corp
International Matex Tank Terminals Ltd Gretna L,D / Comsource American Inc.
Occidental Chemical Corp - Taft Plant
Arkema Inc - Arkema Emulsion Systems
Galata Chemicals LLC - Taft Facility
Sigma Coatings USA B.V.
Blackwater Harvey, LLC
Blackwater Harvey, LLC
Kinder Morgan/Delta Terminal Services LLC - Harvey Terminal
D&A SHIPYARDS EXPRESS LLC
Shell Pipeline Co LP - Houma Station
HUNT OIL CO/STATE LEASE 17695 NO 1 PRODUCTION FACILITY
BP Biofuels Louisiana LLC - Jennings Plant
Alon Refining Krotz Springs Inc
DUPONT PONTCHARTRAIN WORKS
BIG LAKE FUELS LLC
CENTRAL CRUDE INC - GILLIS ENGLISH BAYOU TERMINAL
Carboline Lake Charles Plant
E I DUPONT DE NEMOURS & CO - PONTCHARTRAIN SITE

3628 Hwy 44
10886 Hwy 75
10886 Hwy 75
31073 Terminal Ct
31568 FREEZE RD
36045 HWY 30
36187 Hwy 30
36191 HWY 30
36597 Hwy 30
36637 B HWY 30
36637 Hwy 30
4279 HWY 73
4338 HWY 73
5205 Hwy 3115
5525 HWY 3115
5525 Hwy 3115
7594 HWY 75
8013 Hwy 3251
8112 Hwy 75
8318 ASHLAND RD
8404 RIVER RD (HWY 75)
9156 HWY 73
9156 Hwy 73
9156 HWY 75
7268 River Road (State Highway 75)
River Road (State Highway 75)
5317 Bayou Black Dr
1111 E Airline Hwy
13875 Hwy 43
1125 4th Street.
266 Hwy 3142
355 Hwy 3142
471 Hwy 3142
1401 Destrehan Avenue
1805 4th Street
1805 4th Street
3540 River Rd
4640 PETERS RD
1617 Coteau Rd
28 MILES SOUTH OF
11107 Campbell Wells Rd
356 S Levee Rd, Hwy 105
586 HWY 44
4101 TANK FARM RD
4916 HWY 3059
900 Opelousas St.
586 HWY 44

Garyville	St. John the Baptist Parish	LA	70051-
Geismar	Ascension Parish	LA	70734-
Geismar	Ascension Parish	LA	70734-
Geismar	Ascension Parish	LA	70734-
GEISMAR	Ascension Parish	LA	70734-
GEISMAR	Ascension Parish	LA	70734-
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GEISMAR	Ascension Parish	LA	70734-
Geismar	Ascension Parish	LA	70734-
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GEISMER	Ascension Parish	LA	70734-
GEISMER	Ascension Parish	LA	
Gibson	Terrebonne Parish	LA	70356-
Gramercy	St. John the Baptist Parish	LA	70052-
Greensburg	St. Helena Parish	LA	70441-
GRETNA		LA	70053-
Hahnville	St. Charles Parish	LA	70057-
Hahnville	St. Charles Parish	LA	70057-
Hahnville	St. Charles Parish	LA	70057-
Harvey	Jefferson Parish	LA	70058-
Harvey	Jefferson Parish	LA	70058-
Harvey	Jefferson Parish	LA	70058-
Harvey	Jefferson Parish	LA	70058-
HARVEY	Jefferson Parish	LA	
Houma	Terrebonne Parish	LA	70364-
JEANERETTE		LA	70544-
Jennings	Jefferson Davis Parish	LA	70546-
Krotz Springs	St. Landry Parish	LA	70750-
LA PLACE	ST JOHN THE BAPTIST PARIS	LA	70068-
LAKE CHARLES	Calcasieu Parish	LA	
LAKE CHARLES	Calcasieu Parish	LA	
Lake Charles	Calcasieu Parish	LA	70601-
LAPLACE	St. John the Baptist Parish	LA	70068-

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E I DuPont de Nemours & Co - Pontchartrain Site
AMERICAS STYRENICS LLC - ST JAMES PLANT
SOUTH LA METHANOL LP - ST JAMES METHANOL
Grand Lake Tank Farm
Air Products & Chemicals Inc - Luling Hydrogen Plant
MONSANTO CO - LULING PLANT
OCCIDENTAL CHEMICAL CORP LULING
VALERO REFINING - MERAUX LLC - MERAUX REFINERY
BASS ENTERPRISES PROD CO/COX BAY
VALERUS FIELD SOLUTIONS
Air Products & Chemicals Inc - New Orleans Facility
DIAMOND GREEN DIESEL LLC - GREEN DIESEL PLANT
Air Products & Chemicals Inc - Norco Hydrogen Plant
VALERO REFINING CO - NEW ORLEANS LLC - ST CHARLES REFINERY
MOTIVA ENTERPRISES LLC - NORCO REFINERY
SHELL CHEMICAL LP - NORCO CHEMICAL PLANT - EAST SITE
Shell Chemical LP - Norco Chemical Plant West Site
HEXION INC - NORCO FACILITY
Praxair Inc - Praxair St Charles Plant
Procter & Gamble Manufacturing Co
DEXCO POLYMERS LP - PLAQUEMINE MANUFACTURING PLANT
THE DOW CHEMICAL CO - LOUISIANA OPERATIONS
INEOS OXIDE - A DIVISION OF INEOS AMERICAS LLC
AXIALL LLC - PLAQUEMINE FACILITY
SHINTECH LOUISIANA LLC - SHINTECH PLAQUEMINE PLANT
FLOPAM INC - FLOPAM FACILITY
ExxonMobil Pipeline Co - Anchorage Terminal
Criterion Catalysts & Technologies LP - Port Allen Plant
Air Products Performance Manufacturing Inc - Reserve Plant
Chemtrade Refinery Services Inc - Shreveport Sulfuric Acid Plant
Honeywell UOP (formerly UOP LLC) - SHREVEPORT PLANT
PLAINS MARKETING LP/ST GABRIEL TERMINAL
Taminco US Inc
SYNGENTA CROP PROTECTION LLC - ST GABRIE
Pioneer Americas LLC dba Olin Chlor Alkali Products - St Gabriel Facility
Kinder Morgan Liquids Terminals St Gabriel LLC
Mexichem Fluor Inc - KLEA 134a Plant
SHELL PIPELINE CO LP/SUGARLAND PIPELINE STATION
LOCAP Inc - St James Terminal
Marathon Pipe Line LLC - St James Capline Station
KOCH SUPPLY AND TRADING, L.P./ST. JAMES TERMINAL
Mosaic Fertilizer LLC - Faustina Plant
Capline Terminal Dock No 1
Capline Terminal Dock No 4
INTERNATIONAL MATEX TANK TERMINALS/IMTT - ST. ROSE
ANGUS CHEMICAL CO
CITGO PETROLEUM CORP - LAKE CHARLES MANUFACTURING COMPLEX

586 Hwy 44
9901 HWY 18
HWY 18
3 Mi S of
12501 River Rd
12501 RIVER RD
12503 RIVER RD
2500 E ST BERNARD HWY
5.5 MI SE
7514 HWY 90 W
14700 Intracoastal Dr
14891 AIRLINE DR
14891 AIRLINE HWY
14902 RIVER RD
15536 RIVER RD
15536 RIVER RD
16122 River Rd
16122 RIVER RD LOT 3
40th Avenue/Prospect Rd
3701 Monroe Hwy
21255 HWY 1
21255 HWY 1
21255A HWY 1
26100 HWY 405 S
26270 HWY 405
26790 HWY 405
1450 Lafiton Ln
1699 Catalyst Dr
474 W 19th St
10889 Hwy 1 S
8725 OLD MOORINGSPORT RD
3575 HWY 75
3790 Hwy 30
3905 HWY 75
4205 Hwy 75
4735 Point Clair Rd
4990B ICI Rd
6525 DOE ROAD
6695 LOCAP Rd
6770 Hwy 18
7167 KOCH RD
9959 Hwy 18
Louisiana State Highway 18
Louisiana State Highway 18
11842 RIVER RD.
350 HWY 2
1601 HWY 108 E

Laplace	St. John the Baptist Parish	LA	70068-
LOUISIANA	St. James Parish	LA	70086-
LOUISIANA	St. James Parish	LA	
Lowry	Cameron Parish	LA	99999-
Luling	St. Charles Parish	LA	70070-
LULING	St. Charles Parish	LA	70070-
LULING	St. Charles Parish	LA	70070-
MERAUX	St. Bernard Parish	LA	70075-
NAIRN		LA	70000-
NEW IBERIA		LA	70560-
New Orleans	Orleans Parish	LA	70129-
NORCO	St. Charles Parish	LA	70079-
Norco	St. Charles Parish	LA	70079-
NORCO	St. Charles Parish	LA	70079-
NORCO	St. Charles Parish	LA	70079-
NORCO	St. Charles Parish	LA	70079-
Norco	St. Charles Parish	LA	70079-
NORCO	St. Charles Parish	LA	70079-
Norco	St. Charles Parish	LA	70079-
Pineville	Rapides Parish	LA	71360-
PLAQUEMINE	Iberville Parish	LA	70764-
PLAQUEMINE	Iberville Parish	LA	70764-
PLAQUEMINE	Iberville Parish	LA	70764-
PLAQUEMINE	Iberville Parish	LA	70764-
PLAQUEMINE	Iberville Parish	LA	70764-
PLAQUEMINE	Iberville Parish	LA	70764-
Port Allen	West Baton Rouge Parish	LA	70767-
Port Allen	West Baton Rouge Parish	LA	70767-
Reserve	St. John the Baptist Parish	LA	70084-
Shreveport	Caddo Parish	LA	71115-
SHREVEPORT	Caddo Parish	LA	71107-
ST. GABRIEL	Iberville Parish	LA	70776-
St. Gabriel	Iberville Parish	LA	70776-
ST. GABRIEL	Iberville Parish	LA	70776-
St. Gabriel	Iberville Parish	LA	70776-
St. Gabriel	Iberville Parish	LA	70776-
St. Gabriel	Iberville Parish	LA	70776-
ST. JAMES	St. James Parish	LA	70086-
St. James	St. James Parish	LA	70086-
St. James	St. James Parish	LA	70086-
ST. JAMES	St. James Parish	LA	70086-
St. James	St. James Parish	LA	70086-
ST. JAMES	St. James Parish	LA	
ST. JAMES	St. James Parish	LA	
ST. ROSE		LA	70087-
STERLINGTON	Ouachita Parish	LA	71280-
SULPHUR	Calcasieu Parish	LA	

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Southern Ionics Inc
FIRESTONE POLYMERS LLC - LAKE CHARLES FACILITY
WESTLAKE STYRENE LLC - MARINE TERMINAL
VENCO/LAKE CHARLES CALCINING PLANT
WESTLAKE POLYMERS LLC - POLYETHYLENE I & II PLANTS
Praxair Inc - Sulphur Facility
Westlake Petrochemicals LLC - Poly III
Westlake Petrochemicals LLC - Poly III
WESTLAKE STYRENE LLC - STYRENE MONOMER PRODUCTION FACILITY
Westlake Styrene LLC - Styrene Monomer Production Facility
LBC BATON ROUGE LLC - SUNSHINE TERMINAL
UNION CARBIDE CORP - ST CHARLES OPERATIONS
Upper St Rose Fleeting Upper Fleet Mooring
Mosaic Fertilizer LLC - Uncle Sam Plant
Cabot Corp - Ville Platte Plant
CORNERSTONE CHEMICAL CO - FORTIER PLANT
KEMIRA WATER SOLUTIONS - ACRYLAMIDE UNIT - AMD UNIT
FLINT INK N A
Air Products & Chemicals Inc - Westlake Hydrogen Plant
EAGLE US 2 LLC - LAKE CHARLES COMPLEX
GEORGIA GULF LAKE CHARLES LLC
Phillips 66 Co - Lake Charles Refinery
SASOL CHEMICALS (USA) LLC - LAKE CHARLES CHEMICAL COMPLEX
SASOL NORTH AMERICA INC - LAB PLANT
PPG Industries Inc - Silica Plant
Louisiana Pigment Co LP - Titanium Dioxide Plant
Equistar Chemicals LP
NOT LYONDELL CHEMICAL CO
Bio-Lab Inc
ARCH CHEMICALS CORP - LAKE CHARLES PLANT
Arch Chemicals Corp - Lake Charles Plant
Kinder Morgan Seven Oaks LLC - Seven Oaks Terminal
EVONIK CYRO LLC - MMA PLANT
BASF Corp - Zachary Site
Genesis Crude Oil LP - Port Hudson Terminal
WYETH LLC
GILLETTE COMPANY THE
CREATIVE MATERIALS
SPLASH PRODUCTS INC
LANTHEUS MEDICAL IMAGING INC
WR GRACE & CO CONN
ORGANOGENESIS INC
GLYPTAL INC
SOLENIS LLC
RANDOLPH PRODUCTS COMPANY
POLYMER CONCENTRATES
ITW POLYMERS ADHESIVES NA (formerly ITW DEVCON)

1697 Davison Rd.
1801 HWY 108 E
1820 PAK TANK RD
1920 PAKTANK RD
3525 CITIES SERVICE HWY
4451 S Hwy 108
900 Hwy 108
900 Hwy 108
900 HWY 108
900 Hwy 108
1725 HWY 75
355 HWY 3142 GATE 1
Louisiana State Highway 18
7250 Hwy 44
2066 Cabot Rd
10800 RIVER RD
10800 RIVER RD
116 WASSAN ST. SUITE 2
102 Trousdale Rd
1300 PPG DR
1600 VCM PLANT RD
2200 Old Spanish Trail
2201 OLD SPANISH TRAIL
2501 HOUSTON RIVER RD
3150 Pete Manena Rd
3300 Bayou D'Inde Rd
4101 Hwy 108
900 I-10 W
910 I-10 W
960A I-10 W
960A I-10 W
106 Bridge City Ave
10800 RIVER RD
111 W Irene Rd
769 Port Hudson Cemetary Rd
1 BURTT RD
30 BURTT RD
12 WILLOW RD
95 FITCHBURG RD
331 TREBLE COVE RD
62 WHITTEMORE AVE
150 DAN RD
305 EASTERN AVE
1111 GRATTAN ST
33 HAYNES CIR
179 WOODLAWN ST
30 ENDICOTT ST

Sulphur	Calcasieu Parish	LA	70665-
SULPHUR	Calcasieu Parish	LA	70665-
SULPHUR	Calcasieu Parish	LA	70665-
SULPHUR	Calcasieu Parish	LA	70665-
SULPHUR	Calcasieu Parish	LA	70665-
Sulphur	Calcasieu Parish	LA	70665-
Sulphur	Calcasieu Parish	LA	70663-
Sulphur	Calcasieu Parish	LA	70663-
SULPHUR	Calcasieu Parish	LA	
Sulphur	Calcasieu Parish	LA	70665-
SUNSHINE		LA	70780-
TAFT	St. Charles Parish	LA	70057-
TAFT	St. Charles Parish	LA	70000-
Uncle Sam	St. James Parish	LA	70792-
Ville Platte	Evangeline Parish	LA	70586-
WAGGAMAN	Jefferson Parish	LA	70094-
WAGGAMAN	Jefferson Parish	LA	70094-
WEST MONROE		LA	71292-
Westlake	Calcasieu Parish	LA	70669-
WESTLAKE	Calcasieu Parish	LA	70669-
WESTLAKE	Calcasieu Parish	LA	70669-
Westlake	Calcasieu Parish	LA	70669-
WESTLAKE	Calcasieu Parish	LA	70669-
WESTLAKE	Calcasieu Parish	LA	
Westlake	Calcasieu Parish	LA	70669-
Westlake	Calcasieu Parish	LA	70669-
Westlake	Calcasieu Parish	LA	70669-
WESTLAKE	Calcasieu Parish	LA	
Westlake	Calcasieu Parish	LA	70669-
WESTLAKE	Calcasieu Parish	LA	
Westlake	Calcasieu Parish	LA	70669-
Westwego	Jefferson Parish	LA	70094-
WESTWEGO	Jefferson Parish	LA	70094-
Zachary	East Baton Rouge Parish	LA	70791-
Zachary	East Baton Rouge Parish	LA	70791-
ANDOVER	Essex County	MA	01810-0000
ANDOVER	Essex County	MA	01810-0000
AYER	Middlesex County	MA	01432-0000
AYER	Middlesex County	MA	01433-0000
BILLERICA	Middlesex County	MA	01862-0000
CAMBRIDGE	Middlesex County	MA	02140-0000
CANTON	Norfolk County	MA	02021-0000
CHELSEA	Suffolk County	MA	02150-0000
CHICOPEE	Hampden County	MA	01013-0000
CHICOPEE	Hampden County	MA	01020-0000
CLINTON	Worcester County	MA	01510-0000
DANVERS, TOWN OF	Essex County	MA	01923-0000

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1625	110000308694	325211	8159211	
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1647	110000311421	325991	8173311	
1648	110000581219	325520	8173111	
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1652	110001943434	325211	6628011	
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1660	110012573429	325412	5649111	
1661	110000870781	325180	5857311	
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1663	110000339820	325510	7974411	
1664	110000340131	325510	8026811	
1665	110000339633	325520	5859711	

BRISTOL-MYERS SQUIBB CO
MACE POLYMERS & ADHESIVES INC
SHIELD PACKAGING
ADHESIVE APPLICATIONS INC
EXXON MOBIL OIL CORPORATION
BORDEN & REMINGTON
OMNOVA SOLUTIONS INC
Franklin Paint
ISP FREETOWN FINE CHEMICALS
AW CHESTERTON CO
LONZA BIOLOGICS INC
ALPHAGARY CORPORATION
US PACK
SHIRE HUMAN GENETIC THERAPIES INC
S&E SPECIALTY POLYMERS LLC
CL HAUTHAWAY & SONS
MASSACHUSETTS BIOLOGIC LABORATORIES
BOSTIK INCORPORATED
BAXTER HEALTHCARE CORPORATION
City of New Bedford North Terminal Wharf
HERO COATINGS INC
PCI SYNTHESIS INC
ROHM & HAAS ELECTRONIC MATERIALS
TWEAVE STRETCH WOVEN FABRICS
SAVOGRAN COMPANY
ROUSSELOT PEABODY INC
General Electric Company
TWIN RIVERS TECHNOLOGIES MANUFACTURING C
GLOBE COMPOSITE SOLUTIONS LTD
ITW POLYMERS SEALANTS NORTH AMERICA
ITW POLYMERS SEALANTS NORTH AMERICA (FORMERLY ITW TACC)
Eastman Chemical Company (formerly SOLUTIA INCORPORATED, Indian Orchard Plant)
INEOS MELAMINES LLC
INDUSOL INCORPORATED
ST GOBAIN PERFORMANCE PLASTICS
ASTRAZENECA LP
RPM WOOD FINISHES GROUP INC
ADVANCE COATINGS COMPANY
Surface Coatings, Inc. (formerly Allcoat Technology)
POSCO INCORPORATED
DSM COATING RESINS INC
ABBVIE BIORESEARCH CENTER INC
PQ Corporation
Lenmar Inc.
TNEMEC COMPANY INCORPORATED
SHERWIN-WILLIAMS COMPANY
Simpson Strong-Tie Company, Inc.

38 JACKSON RD
38 ROBERTS RD
OXFORD AVE
41 ONEILL ST
52 BEACHAM STREET
63 WATER ST
83 119 AUTHORITY DR
259 COTTAGE ST
238 SOUTH MAIN ST
860 SALEM ST
97-99 SOUTH ST
170 PIONEER DR
300 WHITNEY ST
300 SHIRE WAY
140 LEOMINSTER SHIRLEY RD
638 SUMMER ST
460 WALK HILL ST
BOSTON ST
27 MAPLE ST
30 PINE ST
13 MALCOLM HOYT DR
9 OPPORTUNITY WAY
60 WILLOW ST
138 BARROWS ST
259 LENOX ST
227 WASHINGTON ST
780 WASHINGTON ST
254 BEECH ST
56 AIR STATION INDUSTRIAL PARK
56 AIR STATION INDUSTRIAL PARK
730 WORCESTER STREET
730-B WORCESTER ST
11 DEPOT ST
700 WARNER BLVD
50 OTIS ST
221 UNION ST
42 DEPOT RD
100 Eames Street
310 BALLARDVALE ST
730 MAIN ST
100 RESEARCH DR
1301 E Fort Ave
150 S. Calverton Road
2300 EDGEWATER AVENUE
2325 HOLLINS FERRY RD
3100 Falls Cliff Rd

DEVENS	Middlesex County	MA	01434-0000
DUDLEY	Worcester County	MA	01571-0000
DUDLEY	Worcester County	MA	01571-0000
EASTHAMPTON	Hampshire County	MA	01027-0000
EVERETT, CITY OF	Middlesex County	MA	02149-0000
FALL RIVER	Bristol County	MA	02721-0000
FITCHBURG	Worcester County	MA	01420-0000
Franklin	NORFOLK	MA	02038-
FREETOWN	Bristol County	MA	02717-0000
GROVELAND	Essex County	MA	01834-0000
HOPKINTON	Middlesex County	MA	01748-0000
LEOMINSTER	Worcester County	MA	01453-0000
LEOMINSTER	Worcester County	MA	01453-0000
LEXINGTON	Middlesex County	MA	02421-0000
LUNENBURG	Worcester County	MA	01462-0000
LYNN	Essex County	MA	01905-0000
MATTAPAN	Suffolk County	MA	02126-0000
MIDDLETON	Essex County	MA	01949-0000
MILFORD	Worcester County	MA	01757-0000
NEW BEDFORD		MA	02740-
NEWBURYPORT	Essex County	MA	01950-0000
NEWBURYPORT	Essex County	MA	01950-0000
NORTH ANDOVER	Essex County	MA	01845-0000
Norton	Bristol County	MA	02766-
NORWOOD	Norfolk County	MA	02062-0000
PEABODY	Essex County	MA	01960-0000
Pittsfield		MA	01201-
QUINCY	Norfolk County	MA	02169-0000
ROCKLAND	Plymouth County	MA	02370-0000
ROCKLAND	Plymouth County	MA	02370-0000
Rockland	Plymouth County	MA	02370-
SPRINGFIELD, CITY OF	Hampden County	MA	01151-
SPRINGFIELD, CITY OF	Hampden County	MA	01151-0000
SUTTON	Worcester County	MA	01590-0000
TAUNTON	Bristol County	MA	02780-0000
WESTBOROUGH	Worcester County	MA	01581-0000
WESTFIELD	Hampden County	MA	01085-0000
WESTMINSTER	Worcester County	MA	01473-0000
Wilmington	Middlesex County	MA	01887-
WILMINGTON	Middlesex County	MA	01887-0000
WILMINGTON	Middlesex County	MA	01887-0000
WORCESTER	Worcester County	MA	01605-0000
Baltimore	Baltimore city City	MD	21230-
Baltimore	Baltimore city City	MD	21223-
BALTIMORE	Baltimore city City	MD	21222-4097
BALTIMORE	Baltimore city City	MD	21230-
Baltimore	Baltimore city City	MD	21211-

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SASOL NORTH AMERICA, INC.
Dap Inc.
Sherwin-Williams Company d/b/a Duron
Merial Select
WALKER MILL AUTO BODY
Eastman Specialties Corporation
Noxell Corporation
CARVEL HALL
USALCO, LLC
Grace - Davison Chemical
Erachem Comilog
VALSPAR CORPORATION
PLAZA FORD
Valpac, Inc
FORT WASHINGTON AUTO BODY
Medimmune, LLC
ULTRA GLOSS COLLISION
Rust-Oleum Corporation - Hagerstown Plant
Nevamar Company LLC (formerly International Paper, Decorative Products Division)
CYTEC ENGINEERED MATERIALS, INC
J. M. Huber Corporation - Havre De Grace
The Sun Products Corporation
NAVAL SUPPORT FACILITY, INDIAN HEAD
MAACO PAINTING & BODY WORKS
Hi-tech Color
NuStar Terminals Operations Partnership L.P.
Sun Chemical - Williamsport
ENGINEERED POLYMER SOLUTIONS
PANOLAM INDUSTRIES
WOODLAND PULP LLC
FIBER EXTRUSION INC
SPECIALTY MINERALS INC
VERSO ANDROSCOGGIN LLC
CATALYST PAPER OPERATIONS
S. D. WARREN COMPANY
ACCESS BUSINESS GROUP, LLC
Biolab Inc
Anderson Development Company
WACKER CHEMICAL CORP
PPG INDUSTRIES INC
L PERRIGO CO
Flint Ink Corporation
PREFIX COATINGS, LLC
DUNCAN AVIATION INC.
Quantum Composites, inc. - Citadel Plastics
AMERICAN COMPOUNDING SPECIALTIES
Michigan Ethanol d/b/a POET Biorefining - Caro

3441 FAIRFIELD ROAD
4630 N Point Blvd
101 Prospect Ave, NW
10026 Main St
8472D WALKER MILL ROAD
10380 Worton Rd
11050 York Rd, MS# YR-299Q
ROUTE 413
2601 Cannery Ave
5500 Chemical Rd
610 Pittman Rd
8200 FISCHERS ROAD
1701 BEL AIR ROAD
1400 Industrial Park Rd
700 CADY DRIVE
633 Research Ct
200 ARUNDEL CORPORATION ROAD
16410 Industrial Lane
7240 Parkway Dr
1300 REVOLUTION ST
PO Box 310
5300 Holabird Ave
3972 WARD RD, STE 101
1017 LESLIE AVENUE
1721 Midway Rd
17877 Piney Point Rd
10319 Grumbacker Lane
16414 INDUSTRIAL LN
PIONITE RD
144 MAIN STREET
RTE 190
RILEY RD GATE #15
RILEY ROAD
35 HARTFORD ST
1329 WATERVILLE ROAD
7575 E Fulton Rd
1400 E Michigan
1415 East Michigan Street
3301 SUTTON RD
961 DIVISION ST
538 EASTERN AVENUE
4600 ARROWHEAD DR
3500 JOSLYN ROAD
15745 S AIRPORT RD
1310 South Valley Center Drive
9984 BORDERLINE DRIVE
1551 Empire Drive

BALTIMORE	Baltimore city City	MD	21226-
Baltimore	Baltimore County	MD	21219-1092
Beltsville	Prince George's County	MD	20705-
Berlin	Worcester County	MD	21811-
CAPITOL HEIGHTS		MD	20743-
Chestertown	Kent County	MD	21620-
Cockeysville	Baltimore County	MD	21030-
CRISFIELD		MD	
Curtis Bay	Baltimore city City	MD	21226-
Curtis Bay	Baltimore city City	MD	21226-
Curtis Bay	Anne Arundel County	MD	21226-
DUNDALK		MD	21222-
FALLSTON		MD	21047-
Federalsburg	Caroline County	MD	21632-
FORT WASHINGTON		MD	20744-
Frederick	Frederick County	MD	21703-
GLEN BURNIE		MD	21061-
Hagerstown (Williamsport?)	Washington County	MD	21795-
Hanover		MD	21076-
HAVRE DE GRACE	Harford County	MD	21078-
Havre De Grace	Harford County	MD	21078-
Highlandtown	Baltimore city City	MD	21224-
INDIAN HEAD		MD	
MARYLAND		MD	21228-
Odenton	Anne Arundel County	MD	21113-
Piney Point	St. Mary's County	MD	20674-
Williamsport	Washington County	MD	21795-
WILLIAMSPORT	Washington County	MD	21795-
AUBURN	Androscoggin County	ME	04211-1014
BAILEYVILLE, TOWN OF	Washington County	ME	04694-3529
EASTPORT		ME	04631-
JAY	Franklin County	ME	04239-
JAY	Franklin County	ME	04239-
RUMFORD		ME	
SKOWHEGAN	Somerset County	ME	04976-4908
ADA	Kent County	MI	49355-
Adrian	Lenawee County	MI	49221-
ADRIAN	Lenawee County	MI	49221-
ADRIAN	Lenawee County	MI	49221-
ADRIAN	Lenawee County	MI	49221-
ALLEGAN	Allegan County	MI	49010-
Ann Arbor	WASHTENAW	MI	48105-
AUBURN HILLS	Oakland County	MI	48326-
BATTLE CREEK	Calhoun County	MI	49015-
BAY CITY	Bay County	MI	48706-
BRIGHTON	Livingston County	MI	48116-
CARO	Tuscola County	MI	48723-

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1714	110000554828	324110	8245611	
1715	110056954434	325211	4210311	
1716	110000406837	336112	8244911	
1717	110000406613	325510	7347611	
1718	110000407168	32551		
1719	110000406828	562211	7347311	
1720	110000494046	493190	7239611	
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1724	110002676649	325998	7424411	
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1727	110000405696	336111	7347511	
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1731	110000411572	325211	7886611	NEIMIE4569
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1756	110000498845	325510	8160011	
1757	110000410056	325520	7885111	
1758	110027360629	325199	8159411	NEI11906
1759	110043787408	325199		

Sekisui Voltek LLC.
MARATHON PETROLEUM COMPANY LP
Alpha Resins, LLC
FCA US LLC - JEFFERSON NORTH ASSEMBLY PLANT
MAGNI INDUSTRIES INC
BASF Corporation
NORTRU, LLC
Sunoco Partners M & T, L.P. - River Rouge Terminal
BUCKEYE TERMINALS, LLC-DETROIT TERMINAL
HUNTSMAN ADVANCED MATERIALS AMERICAS, LLC.
Macdermid Inc
Gage Products Company
Gage Products Company
Buckeye Terminals, LLC - Ferrysburg Terminal
FORD MOTOR COMPANY - FLAT ROCK ASSEMBLY
Buckeye Terminals, LLC - Flint Terminal
Asahi Kasei Plastics North America, inc.
GM GRAND BLANC WELD TOOL CENTER
COOK COMPOSITES AND POLYMERS CO.
H.B. FULLER CO.
Enamelite Industries, Inc.
GEORGIA PACIFIC CHEMICALS LLC
DOW AGROSCIENCES LLC
Perrigo Holland, Inc.
Michigan State University - Bioeconomy Institute
SHERWIN-WILLIAMS COMPANY
CHEM-TREND LP
PENINSULA COPPER INDUSTRIES INC
ALLNEX USA INC.
Richard-Allan Scientific, part of Thermo Fisher
PHARMACIA & UPJOHN CO LLC, A SUBSIDIARY OF PFIZER
Coding Products
Carbon Green Bioenergy
LYMTAL INTERNATIONAL, INC.
PRATT & WHITNEY AUTOAIR
GENERAL MOTORS LLC-LANSING DELTA TOWNSHIP
GENERAL MOTORS LANSING GRAND RIVER ASSEMBLY
BASF CORP
Occidental Chemical Corporation
BUCKEYE TERMINALS, LLC-MARSHALL TERMINAL
Sunoco Pipeline L.P. - Marysville Pump Station
MARYSVILLE ETHANOL, LLC
Flint Hills Resources Marysville, LLC
BASF Corporation
Royal Adhesives & Sealants
THE DOW CHEMICAL COMPANY U.S.A., MIDLAND
THE DOW CHEMICAL COMPANY U.S.A., MIDLAND

17 ALLEN AVE.
1300 S FORT ST
17350 Ryan Rd
2101 CONNER AVE
2771 HAMMOND
3301 Bourke Avenue
421 LYCASTE
500 S DIX AVE
700 S DEACON ST
4917 DAWN AVE
1221 Farrow Ave.
625 Wanda Avenue
821 Wanda Avenue (625 Wanda Avenue?)
17806 NORTH SHORE DRIVE
1 INTERNATIONAL DR
G-5340 N DORT HWY
900 E. Van Riper Rd.
10800 S SAGINAW ST.
1415 STEELE AVENUE, S.W.
2727 KINNEY AVE. NW
3829 Roger B. Chaffee Memorial Blvd. S.E.
4113 W Four Mile Rd
305 N HURON AVE
13295 REFLECTIONS DR
242 Howard Avenue
636 East 40th Street
1445 W MCPHERSON PARK DR.
52430 DUNCAN AVE M-26
2715 MILLER RD
4481 Campus Drive
7000 PORTAGE ROAD
111 WEST PARK DRIVE
7795 Saddlebag Lake Rd
4150 S. LAPEER RD.
5640 ENTERPRISE DR
8175 MILLETT HIGHWAY
920 TOWNSEND ST.
13000 LEVAN ROAD
1600 S. Madison St.
12451 OLD US 27 S
250 MURPHY DR
2510 BUSHA HIGHWAY
2701 S RANGE RD
23930 Concord Ave
4401 PAGE AVE
1261 BUILDING
1790 BUILDING

COLDWATER	Branch County	MI	49036-
DETROIT	Wayne County	MI	48217-
DETROIT	Wayne County	MI	48212-
DETROIT	Wayne County	MI	48215-
DETROIT	Wayne County	MI	48209-
Detroit	Wayne County	MI	48238-
DETROIT	Wayne County	MI	48214-
DETROIT	Wayne County	MI	48217-
DETROIT	Wayne County	MI	48217-
EAST LANSING	Ingham County	MI	48823-
Ferndale	Oakland County	MI	48220-
FERNDALE	Oakland County	MI	48220-
Ferndale	Oakland County	MI	48220-
FERRYSBURG	Ottawa County	MI	49409-
FLAT ROCK	Wayne County	MI	48134-
FLINT	Genesee County	MI	48505-
FOWLERVILLE	Livingston County	MI	48836-
GRAND BLANC		MI	
GRAND RAPIDS	Kent County	MI	49507-
GRAND RAPIDS	Kent County	MI	49534-
GRAND RAPIDS	Kent County	MI	49548-
GRAYLING	Crawford County	MI	49738-
HARBOR BEACH	Huron County	MI	48441-
HOLLAND	Ottawa County	MI	49424-
HOLLAND	Ottawa County	MI	49424-
HOLLAND	Allegan County	MI	49423-
HOWELL	Livingston County	MI	48843-
HUBBELL	Houghton County	MI	49934-
KALAMAZOO	Kalamazoo County	MI	49001-
KALAMAZOO	Kalamazoo County	MI	49008-
KALAMAZOO	Kalamazoo County	MI	49001-
Kalkaska	Kalkaska County	MI	49646-
LAKE ODESSA	Barry County	MI	48849-
LAKE ORION	Oakland County	MI	48359-
LANSING	Ingham County	MI	48911-
LANSING	Ingham County	MI	48917-
LANSING	Ingham County	MI	48921-
LIVONIA	Wayne County	MI	48150-
LUDINGTON	Mason County	MI	49431-
MARSHALL	Calhoun County	MI	49068-
MARYSVILLE	St. Clair County	MI	48040-
MARYSVILLE	St. Clair County	MI	48040-
MARYSVILLE	St. Clair County	MI	48040-
MATTAWAN	Van Buren County	MI	49071-
MICHIGAN CTR	Jackson County	MI	49254-
MIDLAND	Midland County	MI	48667-
MIDLAND	Midland County	MI	48674-

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42.451600	-83.114400
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1782	110000550430	325120	9533111	
1783	110000406436	325110		
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1785	110009597677	493190	6833011	
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1804	110007371441	493110	7305611	
1805	110000494019	325991	8083611	
1805	110000494019	325991	8158611	

CABOT CORPORATION
Dow Corning - Midland Plant
DOW CORNING - MIDLAND PLANT
AXALTA COATING SYSTEMS LLC-MOUNT CLEMENS PLANT
DuPont Mt. Clemens Plant
ESCO Company, LLC
Bayer CropScience LP
Honeywell International (Burdick & Jackson)
Sun Chemical Corp
BUCKEYE TERMINALS- NILES WEST TERMINAL
NCP Coatings, Inc.
Buckeye Terminals, LLC - NILES TERMINAL
Sunoco Partners Marketing & Terminals LP - Owosso
CYGNET AUTOMATED CLEANING, L.L.C.
AkzoNobel Coatings Inc
AKZO NOBEL COATINGS INC.
AKZO NOBEL COATINGS INC. - Car Refinishes
Akzo Nobel Coatings Inc.
Sun Gro Horticulture
Z TECHNOLOGIES CORP
Advanced Micronutrient Products, Inc
Green Plains Holdings II LLC
PRAXAIR, INC
TAMINCO HIGHER AMINES, INC.
Par Sterile Products LLC
SUNOCO PARTNERS MARKETING & TERMINALS LP - Romulus
PREMIER AUTOBODY REPAIR & PAINTING DBA MAACO COLLI
THE ANDERSONS ALBION ETHANOL, LLC
ALBEMARLE CORPORATION
UNITED PAINT & CHEMICAL CORP
FCA US LLC STERLING HEIGHTS ASSEMBLY PLANT
TAYLOR EAST TERMINAL - BUCKEYE (WAS ATLAS OIL CO)
BUCKEYE PIPE LINE HOLDINGS, L.P.- TAYLOR TERMINAL
FASTENER COATINGS, INC.
SOLUTIA INC
ND Industries, Inc.
Quest Specialty Coatings, LLC. dba Quest Automotiv
FCA US LLC WARREN TRUCK ASSEMBLY PLANT
HENKEL Corporation
D N R INC
Red Spot Westland, Inc.
SILBOND CORP
MEDTEC AMBULANCE, A DIVISION OF PIERCE MFG. INC.
KOREX CORP
BUCKEYE TERMINALS, LLC - Woodhaven Terminal
BASF CORP
BASF CORP

3603 S SAGINAW ROAD
3901 S Saginaw Rd
3901 S SAGINAW RD
400 GROESBECK HWY
400 N Groesbeck Highway
1221 East Barney Avenue
1740 WHITEHALL RD
1953 South Harvey Street
4925 EVANSTON AVE
2150 SOUTH 3RD STREET
225 Fort Street
2303 S. 3rd Street
4004 W Main St
45889 MAST STREET
120 Franklin
25 BRUSH ST.
27 BRUSH ST.
30 Brush Street
1160 East Chicago Road
26500 CAPITOL AVENUE
2405 W. Vassar Rd. (M-15)
11440 CEMETERY RD
300 E GREAT LAKES ST.
17168 W JEFFERSON AVE
870 PARKDALE RD
29120 WICK RD
14080 23 MILE RD
26250 B DR N
1421 KALAMAZOO ST
24671 TELEGRAPH RD
38111 VAN DYKE
24501 ECORSE RD
24801 ECORSE RD
1111 RIVER ROAD
5100 W JEFFERSON AVE
1893 Barrett Rd
4205 Martin Road
21500 MOUND ROAD
23343 SHERWOOD AVE.
38475 WEBB DR
550 S. Edwin Street
9901 SAND CREEK HWY
71049 SOUTH US 131
50000 PONTIAC TRAIL
20755 WEST RD
1609 BIDDLE AVE
1609 BIDDLE AVE

MIDLAND	Midland County	MI	48640-
MIDLAND	Midland County	MI	48686-
MIDLAND	Midland County	MI	48686-
MOUNT CLEMENS	Macomb County	MI	48043-
Mount Clemens	Macomb County	MI	48043-
MUSKEGON	Muskegon County	MI	49444-
MUSKEGON	Muskegon County	MI	49445-
MUSKEGON	Muskegon County	MI	49442-
MUSKEGON	Muskegon County	MI	49442-
NILES	Berrien County	MI	49120-
NILES	Berrien County	MI	49120-
NILES	Berrien County	MI	49120-
OWOSSO	Shiawassee County	MI	48867-
PLYMOUTH	Wayne County	MI	48170-
PONTIAC	Oakland County	MI	48341-
PONTIAC	Oakland County	MI	48341-
PONTIAC	Oakland County	MI	48341-
Pontiac	Oakland County	MI	48341-
QUINCY	Branch County	MI	49082-
REDFORD TWP	Wayne County	MI	48239-
REESE	Saginaw County	MI	48757-
RIGA	Lenawee County	MI	49276-
RIVER ROUGE	Wayne County	MI	48218-
RIVERVIEW	WAYNE	MI	
ROCHESTER	Oakland County	MI	48307-
ROMULUS	Wayne County	MI	48174-
SHELBY TWP		MI	48315-
SHERIDAN TWP	Calhoun County	MI	49224-
SOUTH HAVEN	Van Buren County	MI	49090-
SOUTHFIELD	Oakland County	MI	48034-
STERLING HTS	Macomb County	MI	48312-
TAYLOR	Wayne County	MI	48180-
TAYLOR	Wayne County	MI	48180-
THREE RIVERS	St. Joseph County	MI	49093-
TRENTON	Wayne County	MI	48183-
TROY	Oakland County	MI	48084-
WALLED LAKE	Oakland County	MI	48390-
WARREN	Macomb County	MI	48091-
WARREN	Macomb County	MI	48091-
WESTLAND	Wayne County	MI	48185-
Westland	Wayne County	MI	48186-
WESTON	Lenawee County	MI	49289-
WHITE PIGEON		MI	49099-
WIXOM	Oakland County	MI	48393-
WOODHAVEN	Wayne County	MI	48183-
WYANDOTTE	Wayne County	MI	48192-
WYANDOTTE	Wayne County	MI	48192-

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1807				
1808	110018858351	325199	10720911	
1809	110032967957	325199	8484711	NEIMN1257
1810	110000427244	32791	7027511	
1811	110003724480	32551	7020211	
1812	110056963727	332992	6447611	
1813	110024871183	325193	9477911	
1814	110000427495	325412	6320511	
1815	110000427075	325193	6369311	NEIMN1511162
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VERTELLUS HEALTH & SPECIALTY PRODUCTS, LLC
Zeeland
REG Albert Lea LLC
Agra Resources Coop dba EXOL
3M - ALEXANDRIA
RM Johnson Co Inc
FEDERAL CARTRIDGE CO - MEDIUM CALIBER LAB
Bushmills Ethanol
ANI Pharmaceuticals Inc
Chippewa Valley Ethanol Co LLLP
Ethanol 2000 LLP
Plasti-Dip International
Safety-Kleen Systems (5-103-01) - Blaine
Arkema Inc
Tandem Products Inc
Minnesota Energy
APEX INTERNATIONAL
McLaughlin Gormley King Co - Chaska
Al-Corn Clean Fuel
Specialty Minerals Inc - Cloquet
3M COTTAGE GROVE CENTER
3M COTTAGE GROVE CENTER
3M COTTAGE GROVE CENTER
Tate & Lyle Duluth
IKONICS Corp
Ecolab - Engineering Center
APEX INTERNATIONAL MFG.
Alliant Techsystems, Incorporated
Green Plains Fairmont LLC
Green Plains Otter Tail LLC
Granite Falls Energy LLC
Heron Lake BioEnergy LLC
BOISE WHITE PAPER LLC - INTL FALLS
Specialty Minerals Inc
Guardian Energy LLC
Kimball Railcar Services
Northstar Ethanol LLC/POET Biorefining Lk Crystal
Inthermo Inc
Highwater Ethanol LLC
Bimeda Inc
Central MN Ethanol Cooperative
Gevo/Agri-Energy LLC
OMG Electronic Chemicals LLC
ADM CORN PROCESSING - MARSHALL
Valspar Applied Science & Technology Center
Interplastic Corporation, Commercial Resins Division
Diamond Vogel-North Inc.

215 N. Centennial St.
Unable to locate
15200 780th Ave
78242 150th St
2115 S BROADWAY ST
860 Norway Dr E
900 EHLEN DR
17025 Highway 12 NE
210 Main St W
270 20th St NW
40212 510th Ave N
3920 Pheasant Ridge Dr NE
9261 Isanti St NE
157 Highway Ave N
520 Industrial Dr
777 Borden Ave W
134 COLUMBIA COURT
4001 Peavey Rd
797 5th St
2203 East End Ave B
10746 INNOVATION RD
10746 INNOVATION RD
10746 INNOVATION RD
110 Spring St
4832 Grand Ave
940 Lone Oak Rd
10000 VALLEY VIEW RD
5901 SOUTH COUNTY ROAD 18
1125 N Bixby Rd
24096 170th Ave
15045 Highway 23 SE
91246 390th Ave
400 2ND ST
400 2nd St
4745 380th Ave
211 Willow Creek Rd
19200 499th Ave
7640 215th St W
24500 US Highway 14
291 Forest Prairie Rd
17936 Heron Rd
502 Walnut Ave S
5630 Pioneer Creek Dr
400 W ERIE RD
1101 S 3rd St
2015 Northeast Broadway Street
2020 North Second Street

ZEELAND	Ottawa County	MI	49464-
Zeeland	Ottawa County	MI	49464-
Albert Lea	Freeborn County	MN	56007-
ALBERT LEA	Freeborn County	MN	56007-
ALEXANDRIA	Douglas County	MN	56308-
Annandale	Wright County	MN	55302-
ANOKA	Anoka County	MN	55303-
Atwater	Kandiyohi County	MN	56209-
Baudette	Lake of the Woods County	MN	56623-
BENSON	Swift County	MN	56215-
BINGHAM LAKE	Cottonwood County	MN	56118-
Blaine	Anoka County	MN	55449-
Blaine	Anoka County	MN	55449-
Blooming Prairie	Steele County	MN	55917-
Blooming Prairie	Steele County	MN	55917-
BUFFALO LAKE	Renville County	MN	55314-
CHASKA	Carver County	MN	55318-
Chaska	Carver County	MN	55318-
CLAREMONT	Dodge County	MN	55924-
Cloquet	Carlton County	MN	55720-
COTTAGE GROVE	Washington County	MN	55016-
COTTAGE GROVE	Washington County	MN	55016-
COTTAGE GROVE	Washington County	MN	55016-
Duluth	St. Louis County	MN	55808-
Duluth	St. Louis County	MN	55807-
Eagan	Dakota County	MN	55121-
EDEN PRAIRIE	Hennepin County	MN	55344-
Edina		MN	55436-
Fairmont	Martin County	MN	56031-
Fergus Falls	Otter Tail County	MN	56537-
Granite Falls	Chippewa County	MN	56241-
Heron Lake	Jackson County	MN	56137-
INTERNATIONAL FALLS	Koochiching County	MN	56649-
International Falls	Koochiching County	MN	56649-
Janesville	Waseca County	MN	56048-
Kimball	Stearns County	MN	55353-
Lake Crystal	Blue Earth County	MN	56055-
Lakeville	Dakota County	MN	55044-
Lamberton	Redwood County	MN	56152-
Le Sueur	Le Sueur County	MN	56058-
LITTLE FALLS	Morrison County	MN	56345-
Luverne	Rock County	MN	56156-
Maple Plain	Hennepin County	MN	55359-
MARSHALL	Lyon County	MN	56258-
Minneapolis	Hennepin County	MN	55415-
Minneapolis	Hennepin County	MN	55413-
Minneapolis	Hennepin County	MN	55411-

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Hawkins Inc - Minneapolis
Techne/R & D Systems Inc
Permatite Manufacturing
Kohl & Madden Printing Ink Corp
Valspar Corporation
Sierra Corp
KC Colors
Gavilon Fertilizer LLC - Moorhead
DIVERSIFIED ENERGY CO / DENCO II LLC
Perrigo Minnesota
Clariant BU Masterbatches
3M - New Ulm - Electrical Products Div
MULTEK FLEXIBLE CIRCUITS INC-SHELDAHL RD
Ceramic Industrial Coatings
NuCoat Inc
Upsher Smith Laboratories Inc
Rational Energies HC Inc
Pro-Corn LLC
Flint Hills Resources Pine Bend Refinery
Conklin Co Inc
GAVILON FERTILIZER LLC
MULTI-CLEAN
Tanner Systems Inc
Hawkins Inc - Terminal I
3M - Bldg 75 Pharmaceutical Pilot Plant
Splash Products Inc
Minnesota Brewing/Gopher State Ethanol
3M
Saint Paul Park Refining Co LLC
DiaSorin Inc
Interplastic Corp - Vadnais Hghts Plant
HB Fuller Co - Corporate Campus- Vadnais
Manus Products Inc
VALERO WELCOME PLANT
The Specialty Manufacturing Co
Corn Plus
Ticona Polymers Inc
RTP Co
Heartland Corn Products
KINGSFORD MANUFACTURING CO-BRIQUETTING PLANT
AMES TRUE TEMPER INC-BERNIE NORTH PLANT
GARNETT WOOD PRODUCTS-CHARCOAL PLANT
ROYAL OAK ENTERPRISES-BRANSON
Buckman Laboratories
RAY-CARROLL FUELS-CARROLLTON
SHOW ME ETHANOL LLC-CARROLLTON
DYNO NOBEL INC-CARTHAGE PLANT

3100 E Hennepin Ave
614 McKinley Pl NE
712 15th Ave NE
782 29th Ave SE
11400 47th St W
2515 US Highway 12 SW
2012 28th Ave S
227 County Road 22 S
3940 Quebec Ave N
9101 International Pkwy
1700 Minnesota St N
1150 SHELDAHL RD
325 Highway 81
13055 15th Ave N
14905 23rd Ave N
14920 27th Ave N
701 Industrial Dr N
13775 Clark Rd
551 Valley Park Dr S
7632 HWY 101
600 CARDIGAN RD
625 19th Ave NE
1125 Childs Rd
42 Water St W
51 E Maryland Ave
882 W 7th St
301 Saint Paul Park Rd
1951 Northwestern Ave
1219 Willow Lake Blvd
3450 Labore Rd
866 Industrial Blvd W
1444 120TH ST
5858 Centerville Rd
711 6th Ave SE
4610 Theurer Blvd
580 E Front St
53331 State Highway 19 E
21200 MARIES ROAD 314
206 E HUNTS ROAD
11400 COUNTY RD 9890
150 ROYAL OAK DRIVE
14664 EAST STATE HWY 47
26274 HWY 24 EAST
26530 HWY 24 E
17562 GUM ROAD

Minneapolis	Hennepin County	MN	55413-
Minneapolis	Hennepin County	MN	55413-
Minneapolis	Hennepin County	MN	55413-
Minneapolis	Hennepin County	MN	55414-
Minneapolis	Hennepin County	MN	
Minnetonka	Hennepin County	MN	55343-
Montrose	Wright County	MN	55363-
Moorhead	Clay County	MN	56560-
MORRIS	Stevens County	MN	56267-
New Hope	Hennepin County	MN	55427-
New Hope	Hennepin County	MN	55428-
New Ulm	Brown County	MN	56073-
NORTHFIELD	Dakota County	MN	55057-
Osseo	Hennepin County	MN	55369-
Plymouth	Hennepin County	MN	55441-
Plymouth	Hennepin County	MN	55447-
Plymouth	Hennepin County	MN	55447-
PRESTON	Fillmore County	MN	55965-
Rosemount	Dakota County	MN	55068-
Shakopee	Scott County	MN	55379-
SHAKOPEE	Scott County	MN	55379-
SHOREVIEW	Ramsey County	MN	55126-
St. Joseph	Stearns County	MN	56374-
St. Paul	Ramsey County	MN	55106-
St. Paul	Ramsey County	MN	55107-
St. Paul	Ramsey County	MN	55117-
ST. PAUL	Ramsey County	MN	55102-
St. Paul	Ramsey County	MN	
St. Paul Park	Washington County	MN	55071-
Stillwater	Washington County	MN	55082-
Vadnais Heights	Ramsey County	MN	55110-
Vadnais Heights	Ramsey County	MN	55110-
Waconia	Carver County	MN	55387-
WELCOME	Martin County	MN	56181-
White Bear Lake	Ramsey County	MN	55127-
WINNEBAGO	Faribault County	MN	56098-
Winona	Winona County	MN	55987-
Winona	Winona County	MN	55987-
Winthrop	Sibley County	MN	55396-
BELLE	Maries County	MO	65013-
BERNIE		MO	63822-
BRANDSVILLE	Howell County	MO	65688-
BRANSON	Taney County	MO	65616-
Cadet	Washington County	MO	63630-
CARROLLTON	Carroll County	MO	64633-
CARROLLTON	Carroll County	MO	64633-
CARTHAGE	Jasper County	MO	64836-

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PHARMACIA-CHESTERFIELD VILLAGE
SAFETY-KLEEN CORP - CLARKSVILLE
FORD MOTOR CO-KANSAS CITY ASSEMBLY PLANT
GOLDEN TRIANGLE ENERGY-CRAIG
PRAIRIE PRIDE BIO-DIESEL PLANT (ADM)
ROYAL OAK ENTERPRISES-ELLSINORE DIVISION PLANT #1
CHRYSLER LLC, SOUTH ASSEMBLY PLANT
CHRYSLER LLC, NORTH ASSEMBLY PLANT
MARQUIS-MISSOURI TERMINAL-HAYTI
UNILEVER SUPPLY CHAIN INC.-JEFFERSON CITY PLANT
US DEPT OF ENERGY (NNSA)-KANSAS CITY PLT
SUN CHEMICAL-KANSAS CITY
BAYER CROPSCIENCE-KANSAS CITY
POET BIOREFINING-LADDONIA PLANT
REDNECK MANUFACTURING LLC-LAMAR
DYNO NOBEL INC-LOMO PLANT
ASHLAND, INC. - MISSOURI CHEMICAL WORKS
POET BIOREFINING-MACON
MID-MISSOURI ENERGY LLC-MALTA BEND
ADM/MID-AMERICA BIOFUELS LLC
TEVA PHARMACEUTICALS USA INC
TNEMEC COMPANY INCORPORATED
3M NEVADA-COMMERCIAL GRAPHICS
VALSPAR INDUSTRIES
DAVIS PAINT CO.
FUJIFILM MANUFACTURING USA INC-NORTH KANSAS CITY
ARKEMA INC-N KANSAS CITY
Cook Composites and Polymers
BASF CORPORATION
DOW CHEMICAL COMPANY-RIVERSIDE PLANT
THOMASON CHARCOAL COMPANY-THOMASON CHARCOAL COMPANY
AG PROCESSING INC
SIGMA CHEMICAL COMPANY
SIGMA-ALDRICH MFG LLC (DEKALB FACILITY)
MALLINCKRODT LLC
ELANTAS PDG, INC.
SUPERIOR SOLVENTS & CHEMICALS INC.
CAMIE-CAMPBELL, INC
PROCTER & GAMBLE
ROYAL OAK ENTERPRISES INC-SALEM BRIQUET PLANT
ENNIS PAINT INC-SAVERTON
EDWARDS FRP TANK AND REPAIR INC-WINGATE
SUPERIOR SOLVENTS & CHEMICALS
EUTICALS INC-SPRINGFIELD
EUTICALS
3M COMPANY
OMNIUM LLC-ST. JOSEPH

700 CHESTERFIELD PARKWAY
STATE HIGHWAY 79
8121 NORTHEAST US HWY 69
15053 HWY 111
17700 SOUTH HIGHWAY T
CR 60-330
1001 NORTH HIGHWAY DR
1050 DODGE DRIVE
2353 N HWY D
2900 W TRUMAN BLVD
2000 E 95TH STREET
6989 NE CORPORATE DR
8400 HAWTHORN RD
809 N PINE
153 SE 1ST LANE
11025 HWY D
11083 HIGHWAY D
30211 MAJOR AVE
15311 N. SALINE 65 HWY
400 EAST HOLT STREET
5000 SNYDER DRIVE
123 W. 23RD AVENUE
2120 EAST AUSTIN BLVD
1136 FAYETTE
1345 IRON ST
20 W 14 TH AVE
901 E 16TH AVE
920 E 14TH AVE
3150 HWY JJ
500 DOW INDUSTRIAL DRIVE
7903 SUMPTER ROAD
900 LOWER LAKE RD
3300 S. 2ND STREET
3500 DEKALB STREET
3600 N SECOND STREET
5200 N SECOND ST
60 CHOUTEAU AVENUE
9225 WATSON INDUSTRIAL COURT
169 E GRAND AVENUE
673 HWY JJ
13213 HWY 79 SOUTH
31197 WINGATE RD
2055 E BLAINE ST
2460 W BENNETT
2460 W BENNETT STREET
3211 E CHESTNUT EXPRESSWAY
1417 LOWER LAKE ROAD

CHESTERFIELD	St. Louis County	MO	63017-
CLARKSVILLE		MO	
CLAYCOMO	Clay County	MO	64119-
CRAIG	Holt County	MO	64437-
DEERFIELD	Vernon County	MO	64741-
ELLSINORE	Carter County	MO	63937-
FENTON		MO	63026-
FENTON		MO	
HAYTI		MO	63851-
JEFFERSON CITY	Cole County	MO	65109-
KANSAS CITY	Jackson County	MO	64131-
KANSAS CITY	Jackson County	MO	64120-
KANSAS CITY	Jackson County	MO	64120-
LADDONIA	Audrain County	MO	63352-
LAMAR	Barton County	MO	64759-
LOUISIANA	Pike County	MO	63353-
LOUISIANA	Pike County	MO	
MACON	Macon County	MO	63552-
MALTA BEND	Saline County	MO	65339-
MEXICO	Audrain County	MO	65265-
MEXICO	Audrain County	MO	65265-
N. KANSAS CITY	Clay County	MO	64116-
NEVADA	Vernon County	MO	64772-
NORTH KANSAS CITY	Clay County	MO	64116-
NORTH KANSAS CITY	Clay County	MO	64116-
NORTH KANSAS CITY	Clay County	MO	64116-
NORTH KANSAS CITY	Clay County	MO	64116-
North Kansas City	Clay County	MO	64116-
PALMYRA	Marion County	MO	63461-
PEVELY	Jefferson County	MO	63070-
RAYMONDVILLE		MO	65555-
SAINT JOSEPH	Buchanan County	MO	64502-
SAINT LOUIS	St. Louis city City	MO	
SAINT LOUIS	St. Louis city City	MO	63118-
SAINT LOUIS	St. Louis city City	MO	63147-
SAINT LOUIS	St. Louis city City	MO	63147-
SAINT LOUIS	St. Louis city City	MO	63102-
SAINT LOUIS COUNTY	St. Louis city City	MO	63126-
SAINT LOUIS, CITY OF	St. Louis city City	MO	63147-
SALEM	Dent County	MO	65560-
SAVERTON	Ralls County	MO	63467-
SEDALIA	Pettis County	MO	65301-
SPRINGFIELD	Greene County	MO	65803-
SPRINGFIELD	Greene County	MO	65807-
SPRINGFIELD	Greene County	MO	65807-
SPRINGFIELD	Greene County	MO	56802-
ST. JOSEPH	Buchanan County	MO	64504-

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1949	110000441424	325130	8100611	
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1957	110033184088	325191		NEIMO2130002
1958	110040610112	311222		
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ICM BIOFUELS, LLC-LIFELINE
ALBAUGH INC-ST. JOSEPH
MID-WEST INDUSTRIAL CHEMICAL-MID-WEST INDUSTRIAL CHEMICAL
SENSIENT COLORS LLC-JEFFERSON PLANT
HUNTSMAN PIGMENTS AMERICAS-E HOFFMEISTER
KOCH AGRONOMIC SERVICES LLC-
PQ CORPORATION (THE)-ST. LOUIS
CHEMLINE INC-ST. LOUIS
ELEMENTIS SPECIALTIES INC-ELEMENTIS SPECIALTIES INC
THE DIAL CORPORATION-ST. LOUIS
ICL PERFORMANCE PRODUCTS LP-CARONDELET PLANT
U S PAINT CORPORATION-ST. LOUIS
HORNER CHARCOAL CO INC-HORNER CHARCOAL CO INC
AMERICAN ENERGY PRODUCERS, INC.
REICHHOLD, INC-VALLEY PARK
BCP INGREDIENTS-VERONA PLANT
GENERAL MOTORS LLC
ROYAL OAK ENTERPRISES INC-WEST PLAINS BRIQUETTE PLANT
AXIALL, LLC
DAK Americas Mississippi Inc
Calgon Carbon Corporation
SABIC Innovative Plastics US LLC
TOYOTA MOTOR MANUFACTURING MISSISSIPPI INC
Linde LLC, Andrew Chapel Road Facility
Pursue Energy Corporation Thomasville Gas Plant
AKZO NOBEL COATINGS INC.
OMNOVA SOLUTIONS INC
Eka Chemicals Inc
Kingsford Manufacturing Company
Baymont Inc
TRONOX LLC, HAMILTON FACILITY
ZEON CHEMICALS L P
HERCULES INC
GEORGIA PACIFIC CHEMICALS,LOUISVILLE
ELEVANCE NATCHEZ, INC.
First Chemical Corporation
CHEVRON PRODUCTS CO, PASCAGOULA REFINERY
Mississippi Phosphates Corporation
THE CHEMOURS COMPANY FC, LLC
Polychemie Inc
Five Star Marine Inc
Airgas Carbonic Inc, Star Plant
GEORGIA PACIFIC CHEMICALS,TAYLORSVILLE
Ergon Biofuels LLC
Hunt Southland Refining Company
GREENLEAF CO2 SOLUTIONS, LLC - HIWANNEE CO2 PLANT
CF INDUSTRIES NITROGEN LLC

2811 S 11TH ST
4900 PACKERS AVE
1509-11 SUBLETTE AVE
2515 NORTH JEFFERSON AVE
303 E HOFFMEISTER
39 BREMEN AVE
4238 GERALDINE
5151 NATURAL BRIDGE
5548 MANCHESTER
6901 MCKISSOCK
8201 IDAHO AVE
831 S TWENTY-FIRST
1424 GARRISON CUT-OFF RD
16749 US HWY 65N 2 MI SE TINA
249 ST. LOUIS AVE
299 EXTENSION ST
1500 EAST ROUTE A
6425 HIGHWAY ZZ
715 HIGHWAY 25 SOUTH
3303 Port & Harbor Dr. Port Bienville Industrial Park
13121 Webre Road
3531 Port And Harbor Drive
1200 MAGNOLIA WAY
139 Andrew Chapel Rd.
2173 Shell Oil Road
1000 INDUSTRIAL PARK DRIVE
133 YORKVILLE ROAD EAST
4374 Nashville Ferry Road East
2387 Highway 72 East
30 Red Bay Road
40034 TRONOX ROAD
1301 WEST 7TH STREET
613 WEST 7TH STREET
826 SOUTH CHURCH AVENUE
151 L E BARRY ROAD
1001 Industrial Road
250 INDUSTRIAL ROAD
601 Highway 611
7685 KILN DELISLE ROAD
Port Bienville Industrial Park Road D
2910 County Road 501
217 Andrew Jackson Cir.
13136 HIGHWAY 28 WEST
1833 Haining Road
2600 Dorsey Street
90 DOVE LAND DR.
4612 Highway 49 East

ST. JOSEPH	Buchanan County	MO	64053-
ST. JOSEPH	Buchanan County	MO	64504-
ST. LOUIS	St. Louis city City	MO	63110-
ST. LOUIS	St. Louis city City	MO	63106-
ST. LOUIS	St. Louis County	MO	63125-
ST. LOUIS	St. Louis city City	MO	63147-
ST. LOUIS	St. Louis city City	MO	63115-
ST. LOUIS	St. Louis city City	MO	63115-
ST. LOUIS	St. Louis city City	MO	63110-
ST. LOUIS	St. Louis city City	MO	63147-
ST. LOUIS	St. Louis city City	MO	63111-
ST. LOUIS	St. Louis city City	MO	63103-
TANEYVILLE		MO	65759-
Tina		MO	64682-
VALLEY PARK	St. Louis County	MO	63088-
VERONA	Lawrence County	MO	65769-
WENTZVILLE	St. Charles County	MO	63385-
WEST PLAINS	Howell County	MO	65775-
ABERDEEN	Monroe County	MS	39730-
Bay Saint Louis	Hancock County	MS	39520-
Bay St Louis	Hancock County	MS	39520-
Bay St Louis	Hancock County	MS	39520-9669
BLUE SPRINGS	Union County	MS	38828-
Brandon	Rankin County	MS	39042-
Brandon	Rankin County	MS	39042-
CLINTON		MS	39056-
COLUMBUS	LOWNDES	MS	
Columbus	Lowndes County	MS	39702-
Glen	Alcorn County	MS	38846-
Golden	Tishomingo County	MS	38847-
HAMILTON	Monroe County	MS	39746-
HATTIESBURG	Forrest County	MS	39401-
HATTIESBURG	Forrest County	MS	39401-
LOUISVILLE		MS	
NATCHEZ	Adams County	MS	39120-
Pascagoula	Jackson County	MS	39581-3237
PASCAGOULA	Jackson County	MS	39581-
Pascagoula	Jackson County	MS	39567-
PASS CHRISTI	Harrison County	MS	39571-
Pearlington	Hancock County	MS	39572-
Ripley	Tippah County	MS	38663-
Star	Rankin County	MS	39167-0250
TAYLORSVILLE	Smith County	MS	39168-
Vicksburg	Warren County	MS	39183-
Vicksburg	Warren County	MS	39180-
WAYNESBORO	WAYNE	MS	
Yazoo City	Yazoo County	MS	39194-

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39.722050	-94.870590
38.621670	-90.280270
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38.678050	-90.255390
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1993	110037609442	424710	14497911	
1994	110011048428	325311	5271411	
1995	110043806085	324110	7765411	
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1997	110001474226	486110	7588711	
1998	110020343065	325180	7766711	
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2000	110016686898	325414	7618311	
2001	110000428573	325211	7302511	
2002	110043177442	48611	15088811	
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2006	110000586376	325312	8479311	
2007	110056969883	325180	8069011	
2008	110018726208	32551	13443111	
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2009	110004057564	32562	16980011	
2010	110000345617	325613	17022311	
2011	110038158132	325130	17027011	
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2014	110015680949	325510	7979111	
2015	110012474740	325998	8049111	NEI44055
2016	110001479613	325130		
2017	110006825347	325199		NEI46414
2018	110000349436	325991	8255711	
2019		325222		
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2021	110000745187	325414	8047111	
2022	110027231797	32551	15054111	
2023	110000348035	325991	13447211	
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2026	110031359526	325411	17129711	
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2032	110009846471	325199	8135311	
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2035	110022439798	325211	7763411	
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2036	110060342990			NEI45065

BAKER CRUDE OIL STATION - 025-0006
BILLINGS TRANSPORTATION OPERATIONS
Jupiter Sulphur L L C
PHILLIPS 66 - BILLINGS REFINERY
MONTANA SULPHUR & CHEMICAL
CUT BANK CRUDE OIL TANK FARM
AMERICAN CHEMET
CALUMET MONTANA REFINING
GLAXOSMITHKLINE BIOLOGICALS - HAMILTON
HEXION INC
ALBIN STATION
RICHLAND STATION - 083-0015
Plastics Color Corporation of North Carolina
Starpet, Inc.
PCS PHOSPHATE COMPANY, INC. - AURORA
FMC Corporation - Lithium Division
Highland International, Inc.
The Procter & Gamble Manufacturing Company - Browns Summit
The Procter & Gamble Manufacturing Company - Browns Summit
Mount Vernon Chemicals, LLC / Apollo Chemical - Burlington
Americarb, Inc. d/b/a Imerys Pigments for Paper & Packaging
Elementis Chromium
Clariant Corporation
Quantum Coatings Inc
IGM Resins Charlotte Inc
Clariant Corporation
US Polymers
EMERALD CAROLINA CHEMICAL, LLC
CELANESE ACETATE LLC
Novo Nordisk Pharmaceutical
Grifols Therapeutics, Inc.
The Paint Company of NC, Inc. dba Johnson Industrial Coating
Americhem, Inc.
GEORGIA-PACIFIC CHEMICALS, LLC - CONWAY
J. T. Russell and Sons, Inc. - Healing Springs Facility
Merck Sharp & Dohme Corporation
IPS Corporation - Durham Plant
LOPAREX LLC
USCG AVIATION LOGISTICS CENTER HEAVY MAINTENA ** INACTIVE **
Bonar
Shakespeare Conductive Fibers
HEXION INC. - FAYETTEVILLE FACILITY
KURARAY AMERICA, INC. - FAYETTEVILLE
CHEMOURS COMPANY - FAYETTEVILLE WORKS
DAK Americas, LLC / Dupont Teijin Films
DAK Americas, LLC / Dupont Teijin Films
DAK Resins, LLC

BAKER STATION
2110 1ST AVE SOUTH
2201 7th Ave. S.
401 S 23RD ST
607 EXXON ROAD
1252 TANK FARM HILL
145 HIGHWAY 282
1900 10TH ST NE
3670 GRANT CREEK RD
1134 Highway 49 South
801 Pine View Road
1530 NC HIGHWAY 306 SOUTH
1115 Bessemer City - Kings Mtn. Hwy.
465 Industrial Park
6200 Bryan Park Road
6200 Bryan Park Road
2001 Willow Springs Lane
145 Champion Drive
5408 Holly Shelter Road
11701 NC Highway 27 West
1337 N. Woodbranch Dr.
3300 WESTINGHOUSE BLVD
4000 MONROE ROAD
4330 CHESAPEAKE DR
8309 WILKINSON BLVD.
DREYFUS RESEARCH PARK 2300 ARCHDALE DR
3612 Powhatan Road
8368 US Highway Bus. 70 West
10436 North-NC Hwy 150
723 Commerce Drive
200 AMPAC ROAD
18846 NC Highway 8
5325 Old Oxford Highway
600 Ellis Road
816 FIELDCREST ROAD
1664 WEEKSVILLE ROAD
1451 Sand Hill Road
1451 Sand Hill Road
1411 INDUSTRIAL DRIVE
22824 NC HWY 87 WEST
22828 NC HIGHWAY 87 WEST
3216 Cedar Creek Road
3216 Cedar Creek Road
3468 Cedar Creek Road

BAKER	Fallon County	MT	59313-
BILLINGS	Yellowstone County	MT	59101-
Billings	Yellowstone County	MT	59107-
BILLINGS	Yellowstone County	MT	59101-
BILLINGS	Yellowstone County	MT	59107-
CUT BANK	Glacier County	MT	59427-
EAST HELENA	Lewis and Clark County	MT	59635-
GREAT FALLS	Cascade County	MT	59404-
HAMILTON	Ravalli County	MT	59840-
MISSOULA	Missoula County	MT	59808-
SIDNEY	Richland County	MT	59270-
SIDNEY	Richland County	MT	59270-
Asheboro	Randolph County	NC	27203-
Asheboro	Randolph County	NC	27203-
AURORA	Beaufort County	NC	27806-
Bessemer City	Gaston County	NC	28016-
Boone	Watauga County	NC	28607-
Browns Summit	Guilford County	NC	27214-
Browns Summit	Guilford County	NC	27214-
Burlington	Alamance County	NC	27215-
Canton	Haywood County	NC	28716-
Castle Hayne	New Hanover County	NC	28429-
Charlotte	Mecklenburg County	NC	28214-
Charlotte	Mecklenburg County	NC	28270-
Charlotte	Mecklenburg County	NC	28273-6520
Charlotte	Mecklenburg County	NC	28205-
CHARLOTTE	Mecklenburg County	NC	28216-
CHARLOTTE	Mecklenburg County	NC	28214-9052
CHARLOTTE	Mecklenburg County	NC	28210-
Clayton	Johnston County	NC	27520-
Clayton	Johnston County	NC	27520-
Clemmons	Davidson County	NC	27102-
Concord	Cabarrus County	NC	28025-
CONWAY	Northampton County	NC	27820-
DENTON		NC	27239-
Durham	Durham County	NC	27712-
Durham	Durham County	NC	27703-
EDEN	Rockingham County	NC	27288-
ELIZABETH CITY	Pasquotank County	NC	27909-
Enka	Buncombe County	NC	28728-
Enka	Buncombe County	NC	28728-
FAYETTEVILLE	Cumberland County	NC	28301-
FAYETTEVILLE	Cumberland County	NC	
FAYETTEVILLE	Bladen County	NC	28306-
Fayetteville	Cumberland County	NC	28312-
Fayetteville	Cumberland County	NC	28312-
Fayetteville	Cumberland County	NC	28312-

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Clear Path Recycling, LLC
Novozymes North America, Inc.
Lubrizol Advanced Materials, Inc.
Chemtura Corporation
The Procter & Gamble Manufacturing Company - Greensboro
Sherwin-Williams Diversified Brands Greensboro
PPG Industries, Inc.
Sherwin-Williams Greensboro
Vertellus Performance Materials Inc.
Chemol Company
Evonik Corporation
Solenis, LLC
Dow Corning Corporation
LANXESS CORP (formerly Unitex Chemical Corporation)
Alberdingk Boley, Inc.
Ecolab, Inc.
Metrics Inc.
Greenville Service Company, Inc.
CNA HOLDINGS LLC-SHELBY
CNA HOLDINGS, LLC - SHELBY
Trans Carolina Products, LLC
Trinity Manufacturing, Inc.
Chemical Specialties Inc
SHURTAPE TECHNOLOGIES - HICKORY/HIGHLAND PLT
Carolina Solvents, Inc.
HK Research Corporation
RPM Wood Finishes Group
Carolina Casting, Inc.
Akzo Nobel Coatings Inc.
Valspar Coatings
EPS Valspar (formerly Lilly Industries (USA), Inc.)
V & E Components, Incorporated
EPS Valspar (formerly Lilly Industries (USA), Inc.)
Kao Specialties Americas, LLC
Piedmont Chemical Industries I, LLC
Banner Pharmacaps, Inc.
Innospec Active Chemicals, LLC
Novartis
SHURTAPE TECHNOLOGIES, INC. - PLANT NO. 24
RPM Wood Finishes Group, Inc.
Radiator Specialty Company
DRB BIOFUELS, INC ** INACTIVE **
Rockwood Lithium, Inc.
EI DU PONT - KINSTON PLANT
American Distillation, Inc.
Coatings and Adhesives Corporation
DAK AMERICAS LLC ** INACTIVE **

3500 Cedar Creek Road
77 Perry Chapel Church Road
207 Telegraph Drive
214 West Ruby Avenue
100 Swing Road
1025 Howard Street
109 PPG Road
113 Stage Coach Trail
2110 High Point Road
2300 RANDOLPH AVE
2401 Doyle Street
2401 Doyle Street
2914 Patterson Street
520 BROOME RD
6008 High Point Road
8300 Capital Drive
1240 Sugg Parkway
5900 Martin Luther King Jr. Hwy.
2525 BLACKSBURG RD
2525 BLACKSBURG ROAD
11 E.V. Hogan Drive
11 EV Hogan Drive
5910 Pharr Mill Road
1620 HIGHLAND AVENUE AND 17TH STREET NE
2274 1st Street SE
908 Lenoir Road
P.O. Box 22000
1416 Progress Ave.
1431 Progress Avenue
1647 English Raod
1717 English Road
2130 Brevard Road
2147 Brevard Road
243 Woodbine Street
331 Burton Avenue
4125 Premier Drive
510 West Grimes Avenue
475 Green Oaks Parkway
220 PLEASANT HILL ROAD
3194 Hickory Boulevard
600 Radiator Road
28333 US HIGHWAY 64
348 Holiday Inn Drive
4693 HWY 11 N
1690 NE Royster Road
1901 Popular Street
3500 DANIELS ROAD NE

Fayetteville	Cumberland County	NC	28312-
Franklinton	Franklin County	NC	27525-
Gastonia	Gaston County	NC	28056-
Gastonia	Gaston County	NC	28054-
Greensboro	Guilford County	NC	27409-
Greensboro	Guilford County	NC	27403-
Greensboro	Guilford County	NC	27409-
Greensboro	Guilford County	NC	27409-
Greensboro	Guilford County	NC	27403-
Greensboro	Guilford County	NC	27406-
Greensboro	Guilford County	NC	27406-
Greensboro	Guilford County	NC	27406-
Greensboro	Guilford County	NC	27407-
Greensboro	Guilford County	NC	27406-
Greensboro	Guilford County	NC	27407-
Greensboro	Guilford County	NC	27409-
Greenville	Pitt County	NC	27834-
Greenville	Pitt County	NC	27834-
GROVER	Cleveland County	NC	28073-
GROVER	Cleveland County	NC	28073-
Hamlet	Richmond County	NC	28345-
Hamlet	Richmond County	NC	28345-
Harrisburg	Cabarrus County	NC	28075-
HICKORY	Catawba County	NC	28603-
Hickory	Catawba County	NC	28602-
Hickory	Catawba County	NC	28601-
Hickory	Catawba County	NC	28603-
High Point	Guilford County	NC	27260-
High Point	Guilford County	NC	27261-
High Point	Guilford County	NC	27261-
High Point	Guilford County	NC	27262-
High Point	Guilford County	NC	27263-
High Point	Guilford County	NC	27261-
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High Point	Guilford County	NC	27261-
High Point	Guilford County	NC	27265-
High Point	Guilford County	NC	27260-
Holly Springs	Wake County	NC	27540-
HUDSON	Caldwell County	NC	28638-
Hudson	Caldwell County	NC	28638-
Indian Trail	Union County	NC	28079-
JAMESVILLE		NC	27846-
Kings Mountain	Cleveland County	NC	28086-
KINSTON	Lenoir County	NC	28502-
Leland	Brunswick County	NC	28451-
Leland	Brunswick County	NC	28451-
LELAND	Brunswick County	NC	28451-

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2088	110042039692	311930		
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2120	110001482958	325991	8313011	
2121	110041184161	32551	7997811	
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2122	110000351342	325312	8313111	
2123	110000351379	32551	8297711	
2124	110000346439	32552	7233211	
2125	110041005328	333923	8121811	
2126	110000345341	325510		
2127	110002357690	325998	16980311	

ExxonMobil Chemical Company
Vitacost.com
COVERIS ADVANCE COATINGS US, L.L.C
Umicore USA, Inc.-Umicore Autocatalyst Recycling
AVOCA INCORPORATED
Arclin USA, LLC
BonaKemi USA, Inc.
Hexion Inc. - Morganton
Performance Fibers, Inc.
Carolina Pelleting and Extrusion, Inc.
Revlon Consumer Products Corp
Conopco, Inc.
Ajinomoto North America, Inc.
Mallinckrodt - Raleigh Pharmaceutical Plant
Arteva Specialties, S.a.r.l. (KoSa)
Industrial & Agricultural Chemicals, Inc.
Dystar Limited Partnership
Linde Gas North America LLC
Biogen Idec US Limited Partnership
United Therapeutics Corporation
Diosynth-RTP, Inc.
OAK-BARK CORP / HEXION INC. - ACME OPERATIONS / WRIGHT CORP / Silar LLC
OAK-BARK CORP / HEXION INC. - ACME OPERATIONS / WRIGHT CORP / Silar LLC
OAK-BARK CORP / HEXION INC. - ACME OPERATIONS / WRIGHT CORP / Silar LLC
SEPRO DISTRIBUTION CENTER
Hospira, Inc.
National Starch and Chemical Company
AkzoNobel Surface Chemistry LLC
Innospec Active Chemicals, LLC - Spencer Plant
DURAFIBER TECHNOLOGIES
Henkel Electronic Materials, LLC
Coty US LLC
Pentair Water Pool and Spa, Inc.
Pfizer
Saiden Technologies
Archer Daniels Midland Company
PIONEER ECLIPSE CORP
PIONEER ECLIPSE CORP
Mack Molding Company
Engineered Polymer Solutions, D/B/A Valspar
Engineered Polymer Solutions, D/B/A Valspar
Southern States Cooperative, Inc., Statesville Fertilizer
Warlick Paint Company, Inc.
Southern Resin, Inc.
COLUMBUS MCKINNON CORP - WADESBORO OPERATIONS
Chemcraft International Inc.
Giles Chemical, A Division of Premier Magnesia, LLC

3500 Mount Misery Road
130 Lexington Parkway
700 CRESTDALE RD
17182 Airport Road
841 AVOCA FARM ROAD
790 Corinth Road
4275 Corporate Center Drive
114 Industrial Boulevard
338 Pea Ridge Road
1694 Fisher Court
1501 Williamsboro Street
100 Faberge Boulevard
4020 Ajinomoto Drive
8801 Capital Boulevard
Unable to locate
2042 Buie Philadelphus Road
209 Watlington Industrial Drive
11 Triangle Drive
5000 Davis Drive
55 T. W. Alexander Drive
6051 George Watts Hill Drive
333 NEILS EDDY ROAD
333 NEILS EDDY ROAD
333 NEILS EDDY ROAD
1259 ATLANTIC AVE
4285 North Wesleyan Boulevard
237 LUMBER ST.
485 Cedar Springs Road, Unit A
500 Hinkle Lane
7401 STATESVILLE BOULEVARD
825 Cedar Springs Road
1400 Broadway Road
1620 Hawkins Avenue
4300 Oak Park
5618 Clyde Rhyne
1730 East Moore Street
1 ECLIPSE RD
1 ECLIPSE RD.
149 Water Tank Road
188 Sidetrack Drive
188 Sidetrack Drive
2582 Salisbury Highway
945 Monroe Street
3440 Denton Road
2020 COUNTRY CLUB ROAD
P.O. Box 669 (3950 New Walkertown Road)
102 Commerce Street

Leland	Brunswick County	NC	28451-
Lexington	Davidson County	NC	27295-
MATTHEWS	Mecklenburg County	NC	28105-4700
Maxton	Scotland County	NC	28364-
MERRY HILL		NC	27957-
Moncure	Chatham County	NC	27559-
Monroe	Union County	NC	28110-
Morganton	Burke County	NC	28655-
New Hill	Chatham County	NC	27562-
Newton	Catawba County	NC	28658-
Oxford	Granville County	NC	27565-
Raeford	Hoke County	NC	28376-
Raleigh	Wake County	NC	27610-
Raleigh	Wake County	NC	27616-
Raleigh	Wake County	NC	
Red Springs	Robeson County	NC	28377-
Reidsville	Rockingham County	NC	27320-
Research Triangle Park	Durham County	NC	27709-
Research Triangle Park	Wake County	NC	27009-
Research Triangle Park	Durham County	NC	27709-
Research Triangle Park	Wake County	NC	27709-
RIEGELWOOD	Columbus County	NC	28456-
RIEGELWOOD	Columbus County	NC	28456-
RIEGELWOOD	Columbus County	NC	28456-
ROCKY MOUNT	EDGECOMBE	NC	27801-
Rocky Mount	Nash County	NC	27804-
Salisbury	Rowan County	NC	28144-
Salisbury	Rowan County	NC	28147-
Salisbury	Rowan County	NC	28144-
SALISBURY	Rowan County	NC	28147-
Salisbury	Rowan County	NC	28147-
Sanford	Lee County	NC	27332-
Sanford	Lee County	NC	27330-
Sanford	Lee County	NC	27330-
Sanford	Lee County	NC	27330-
Southport	Brunswick County	NC	28461-
SPARTA	ALLEGHANY	NC	28675-
SPARTA	ALLEGHANY	NC	28675-
Statesville	Iredell County	NC	28677-
Statesville	Iredell County	NC	28677-
Statesville	Iredell County	NC	28677-
Statesville	Iredell County	NC	28677-
Statesville	Iredell County	NC	28677-
Thomasville	Davidson County	NC	27360-
WADESBORO	Anson County	NC	28170-
Walkertown (Winston Salem?)		NC	27051-
Waynesville	Haywood County	NC	28786-

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Qualicaps, Inc.
Zink Imaging Incorporated
United Organics Corp
CTI of NC Inc
KINDER MORGAN, WILMINGTON - WOODBINE STREET
KINDER MORGAN, WILMINGTON
INVISTA S.A.R.L. ** INACTIVE **
KINDER MORGAN OPERATING LP C
Vopak Terminal South Wilmington
FORTRON INDUSTRIES LLC
INVISTA, S.A.R.L.
Wilbara, LLC
Wilbara, LLC
Merck Sharp and Dohme Corporation
Purdue Pharmaceuticals LP
BD Rx Inc.
SUN CHEMICAL SPECIALTY INKS
Powerlab, Inc.
Unifi Manufacturing, Inc. - Plant T5
GSK, Inc.
DAKOTA GASIFICATION COMPANY-GREAT PLAINS SYNFUELS PLANT
Tharaldson Ethanol Plant I, LLC
Hankinson Renewable Energy, LLC
Richardton Ethanol Plant
BLUE FLINT ETHANOL, LLC
ADM PROCESSING-VELVA FACILITY
E Energy Adams LLC
Valero Renewable Fuels Company
Green Plains Atkinson LLC
Pacific Ethanol Aurora East
BEATRICE NITROGEN PLANT
CARGILL INC POLYOL SWEETENERS / PURAC America Inc / Cargill Lactic Acid Plant / NatureWorks LLC
CARGILL INC POLYOL SWEETENERS / PURAC America Inc / Cargill Lactic Acid Plant / NatureWorks LLC
CARGILL INC POLYOL SWEETENERS / PURAC America Inc / Cargill Lactic Acid Plant / NatureWorks LLC
CARGILL INC POLYOL SWEETENERS / PURAC America Inc / Cargill Lactic Acid Plant / NatureWorks LLC
EVONIK CORPORATION
PURAC AMERICA INC
Bridgeport Ethanol LLC
Nebraska Corn Processing LLC
Green Plains Central City LLC
Columbus Terminal
ADM CORN PROCESSING
Merck Animal Health
Loveland Products Inc
Flint Hills Resources Fairmont
Geneva Terminal
Optic Fertilizer Inc

6505 Franz-Warner Parkway
6900 Konica Drive
1008 East Boulevard
1002 South Front Street
1710 WOODBINE STREET
2005 NORTH 6TH STREET
3325 RIVER ROAD
3340 RIVER ROAD
3340 River Road
4600 HIGHWAY 421 NORTH
4600 HIGHWAY 421 NORTH
4620 Highway 421 North
4620 Highway 421 North
4633 Merck Road
4701 Purdue Drive
Wilson Corporate Park
1100 FAIRCHILD ROAD
3352 Old Lexington Road
1032 Unifi Industrial Road
1011 N Arendell Avenue
420 COUNTY ROAD 26
3549 153rd Ave. SE
9230 County Road 1
3682 Highway 8 South
2841 3RD STREET SW
1388 HWY 97
13238 E Aspen Rd
2615 260th St
87590 Hillcrest Rd
1205 S O Rd
21178 SW 89TH RD
650 INDUSTRIAL PARK DR
650 INDUSTRIAL PARK DR
650 INDUSTRIAL PARK DR
650 INDUSTRIAL PARK DR
650 INDUSTRIAL PARK DR
650 INDUSTRIAL PARK DR
9216 County Road 90 St
107 Potter St
214 20th St
147 Road D
3000 E 8TH ST
21401 W Center Rd
56906 Highway 8
1214 Road G
1479 N 13th St
6090 Optic Rd.

Whitsett	Guilford County	NC	27377-
Whitsett	Guilford County	NC	27377-
Williamston		NC	27892-
Wilmington	New Hanover County	NC	28401-
WILMINGTON	New Hanover County	NC	28401-
WILMINGTON	New Hanover County	NC	28401-
WILMINGTON	New Hanover County	NC	28402-
WILMINGTON	New Hanover County	NC	
Wilmington	New Hanover County	NC	28412-
WILMINGTON	New Hanover County	NC	28401-
WILMINGTON	New Hanover County	NC	28402-
Wilmington	New Hanover County	NC	28402-
Wilmington	New Hanover County	NC	28402-
Wilson	Wilson County	NC	27893-
Wilson	Wilson County	NC	27894-
Wilson	Wilson County	NC	27893-
WINSTON-SALEM	Forsyth County	NC	27105-4528
Winston-Salem	Forsyth County	NC	27107-
Yadkinville	Yadkin County	NC	27055-
Zebulon	Wake County	NC	27597-
BEULAH	Mercer County	ND	58523-
Casselton	Cass County	ND	58012-
Hankinson	Richland County	ND	58041-
Richardton	Stark County	ND	58652-
UNDERWOOD	McLean County	ND	58576-
VELVA	McHenry County	ND	58790-
Adams	Gage County	NE	68301-4103
Albion	Boone County	NE	68620-5860
Atkinson	Holt County	NE	68713-5000
Aurora	Hamilton County	NE	68818-5304
BEATRICE	Gage County	NE	68310-6772
BLAIR	Washington County	NE	68008-
BLAIR	Washington County	NE	68008-
BLAIR	Washington County	NE	68008-
BLAIR	Washington County	NE	68008-
BLAIR	Washington County	NE	68008-
BLAIR	Washington County	NE	68008-
Bridgeport	Morrill County	NE	69336-2576
Cambridge	Furnas County	NE	69022-6539
Central City	Merrick County	NE	68826-2054
Columbus	Colfax County	NE	68601-
COLUMBUS	Platte County	NE	68601-9073
Elkhorn	Douglas County	NE	68022-2202
Fairbury	Jefferson County	NE	68352-5561
Fairmont	Fillmore County	NE	68354-3054
Geneva		NE	68361-
Gibbon	Buffalo County	NE	68840-3049

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2175	110001506004	325320	7572811	
2176	110012710931	325193	16421211	
2177	110045816051	811121		
2178	110040499127	325193	15084311	
2179	110017358811	325193	9429511	
2180	110018859467	325193	16431911	
2181	110000447623	325199	6710611	NEINE0316
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2183	110010163802	486910	7698211	NEINE15718
2184	110058354640	325193	16414211	
2185	110029535242	325193	16422811	
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Cooperative Producers Inc
AGP CORN PROCESSING INC
CHIEF ETHANOL FUELS INC.
Siouxland Ethanol LLC
Monsanto Company
Cornhusker Energy Lexington
ANDERSONS BODY SHOP
Standard Ethanol LLC
KAAPA Ethanol LLC
Elkhorn Valley Ethanol LLC
American Laboratories Inc.
American Laboratories Inc.
Magellan Pipeline Company LP
Green Plains Atkinson LLC
Green Plains Ord LLC
Osceola Terminal
Husker Ag LLC
Abengoa Bioenergy of Nebraska
Midwest Renewable Energy LLC
Trenton Agri Products LLC
Green Plains Wood River LLC
Abengoa Bioenergy Corporation
GREEN PLAINS YORK LLC
WHITE MOUNTAIN BIODIESEL LLC
NASHUA CORPORATION
HAMPSHIRE CHEMICAL CORPORATION
THE PROCTER & GAMBLE MFG CO
IMTT BAYONNE
IMTT-Bayonne
Exxon
Reckitt Benckiser
DSM NUTRITIONAL PRODUCTS
BASF Corporation - Belvidere
LANXESS SYBRON CHEMICALS INC
RBH Dispersions
Reichhold Chemicals, Incorporated
ImClone Systems Corporation
Agfa Corporation
EMD PERFORMANCE MATERIALS CORP
POLYMER ADDITIVES INC (FORM: FERRO CORP - DE RIV. PLANT)
ABC BUS COMPANIES
PAN TECHNOLOGY
PRAXAIR INC
KINDER MORGAN LIQUID TERMINALS LLC
West-Ward Pharmaceutical Corporation
ACTEGA Kelstar, Inc.
INNOVATIVE COSMETIC CONCEPTS LLC

10445 N Apple Ave
2801 E 7TH ST
4225 E South St
1501 Knox Blvd
2615 Antelope Ave
1111 E Industry Dr
2542 N 27 ST STE B
76080 Road 338
8450 Kaapa Ln
3002 N Victory Rd
4410 South 102nd Street
5020 South 33rd Street
9405 Bennington Rd
49131 Highway 20
48267 Val E Rd
1705 131st Rd
54048 Highway 20
35955 Navaho Rd
27532 W Highway 30
36638 US Highway 34
7874 S 140th Rd
1414 Road O
1414 ROAD O
35 BUSINESS PARK RD
59 DANIEL WEBSTER HWY
2 E SPIT BROOK RD
100 ESSEX AVE EAST
250 E 22ND ST
IMTT-BAYONNE
799 RTE. 206 & HILLSBOROUGH RD
205 MACKS IS DR
P.O. Box 328, 1 James Street
200 BIRMINGHAM RD
L-5 Factory Lane
33 IMCLONE DR
50 MEISTER AVE
70 MEISTER AVE
170 RTE 130 SOUTH
1494 FEDERAL ST
117 MOONACHIE AVE
554 SHELL RD
78 LAFAYETTE ST
2 ESTERBROOK LN
1050 TAYLORS LN
61 KULLER RD

Hansen	Adams County	NE	68901-8229
HASTINGS	Adams County	NE	68901-5560
Hastings	Adams County	NE	68901-8338
Jackson	Dakota County	NE	68743-3060
Kearney	Buffalo County	NE	68847-3876
Lexington	Dawson County	NE	68850-3857
LINCOLN	LANCASTER	NE	68508-
Madrid	Perkins County	NE	69150-4014
Minden	Kearney County	NE	68959-2717
Norfolk	Madison County	NE	68701-0833
Omaha	Douglas County	NE	68127-
Omaha	Douglas County	NE	68107-
Omaha	Douglas County	NE	68122-
O'Neill	Holt County	NE	68763-4693
Ord	Valley County	NE	68862-1988
Osceola		NE	68651-
Plainview	Pierce County	NE	68769-4072
Ravenna	Buffalo County	NE	68869-3240
Sutherland	Lincoln County	NE	69165-2148
Trenton	Hitchcock County	NE	69044-1767
Wood River	Hall County	NE	68883-9300
York	York County	NE	68467-
YORK	York County	NE	68467-8235
HAVERHILL		NH	03774-
MERRIMACK		NH	03054-
NASHUA	HILLSBOROUGH	NH	
AVENEL	Middlesex County	NJ	07001-2020
BAYONNE	Hudson County	NJ	07002-
BAYONNE	Hudson County	NJ	07002-
Bayway		NJ	
BELLE MEAD	Somerset County	NJ	08502-
BELVIDERE	Warren County	NJ	07823-1113
Belvidere	Warren County	NJ	07823-
BIRMINGHAM		NJ	08011-
Bound Brook		NJ	08805-
Bound Brook		NJ	08805-
BRANCHBURG	Somerset County	NJ	08876-
BRANCHBURG	Somerset County	NJ	08876-
BRANCHBURG	Somerset County	NJ	08876-
BRIDGEPORT	Gloucester County	NJ	08014-
CAMDEN		NJ	08105-
CARLSTADT	Bergen County	NJ	07072-
CARNEYS POINT	Salem County	NJ	08069-
CARTERET	Middlesex County	NJ	07008-
CHERRY HILL	Camden County	NJ	08003-4002
CINNAMINSON	Burlington County	NJ	08077-
Clifton	Passaic County	NJ	07011-

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41.215980	-96.072080
41.208610	-95.963280
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2222	110000322035			
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2224	110000321937	325180	8133811	
2225	110022428149	325620	17169011	
2226	110000321964	321999		
2227	110002467642	325110	7987811	
2228	110000836971	325412	7519311	
2229	110015121205	493110	9370911	
2230	110001544106			
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2232	110000319904	325199	7391911	
2233	110000320616	325910	7428111	
2234	110005986068	325613	7312211	
2235	110000864468	32551		
2236	110005986139	325199	7426111	
2237		325222		
2238	110042074180	999999		
2239	110000321036	325188		NEINJT$881
2240				
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2242	110000318317	325612		
2243	110000318406	325412	7989811	
2244	110007393766	325211	7989411	
2245	110004143212	325412	5110211	
2246	110045552914	325520	5111511	
2247	110021327358	325412	7426711	
2248	110000318549	562211	7990211	
2249	110064022481	325998		
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2250	110041133163	324110	7903711	
2251	110044839663	325620	17168811	
2252	110000803845	486910		
2253	110000318488	493110	7993211	
2254	110000318497	493110	7549311	
2255	110064022481	325199	7548811	
2255	110021326518	325199	7548811	
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2257	110018919660	325520	7635011	
2258	110011499477	325611	7526111	
2259	110041854375	325510	7393011	
2260		325222		
2261	110000320395	325998	7310611	

Sherwin-Williams
EI DUPONT DE NEMOURS (CHAMBERS WORKS)
CHEMOURS CHAMBERS WORKS / DUPONT DOW PERFORMANCE ELASTOMERS LLC
CHEMOURS CHAMBERS WORKS / DUPONT DOW PERFORMANCE ELASTOMERS LLC
Novartis Pharmaceuticals Corporation
Amerchol Corp
Equistar Chemicals, LP
Grace Davison Edison Facility
Cosmetic Essence, LLC
Ferro Corporation
Mobil Chemical Company
Actavis Elizabeth LLC
New York Terminals, LLC
Archer Daniels Midland Co Bayway Plant Wharf
Custom Chemical Corporation
Thermo Fisher Scientific Incorporated
Selective Coatings & Inks, Inc.
Stepan Company
Benjamin Moore & Company
HATCO CORP
DU PONT REPAUNO PLANT
GEO SPECIALTY CHEMICALS INC
AMSPEC CHEMICAL CORP
Henkel Corporation
Daniel Products Company, Inc. (formerly Elementis)
ASHLAND CHEMICAL CO DREW DIV
Merck Sharp & Dohme Corp.
SYNRAY CORPORATION
Accupac Inc Lakewood
Sika Corporation - Lakewood Operations
E R SQUIBB & SONS LLC
SAFETY KLEEN CORP LINDEN RECYCLE CTR
INFINEUM USA - BAYWAY CHEM
INFINEUM USA - BAYWAY CHEM
PHILLIPS 66 (BAYWAY REF/CONOCO)
Fiabila USA Linden Division
BUCKEYE PIPE LINE
NUSTAR TERMINALS OPERATIONS PARTNERSHIP LP
ST LINDEN TERMINAL LLC INLAND FACILITY AND SHORESIDE FACILITY
Bayway Chemical Plant
Bayway Chemical Plant
Formosa Plastics Corporation
SIKA CORPORATION
ACUPAC PACKAGING INC
StonCor Group Inc.
STEPAN CO MAYWOOD
STEPAN COMPANY

226 TALMADGE RD
CANAL RD_& RT 130
CHAMBERS WORKS - ROUTE 130
CHAMBERS WORKS - ROUTE 130
NOVARTIS PHARMACEUTICALS CORPORATION
136 Talmadge Rd
340 MEADOW RD
340 MEADOW RD
50 CLEARVIEW AVE
54 KELLOGG CT
EDISON SYNTHETICS PLANT
200 ELMORA AVE
534 SOUTH FRONT ST
554 South Front Street
30 Paul Kohner Place
THERMO FISHER SCIENTIFIC
5008 INDUSTRIAL RD
FOURTH ST
360 RT 206
1020 KING GEORGES POST RD
200 N REPAUNO AVE
50 N MARKET ST
751 WATER ST.
517 12TH ST (could street be 1301 JEFFERSON STREET?)
400 Claremount Avenue
1106 HARRISON AVE
2000 GALLOPING HILL RD
209 NORTH MICHIGAN AVE
1700 OAK ST
SIKA CORPORATION
Route 206 and Province Line Road
1200 SYLVAN ST
CORNER OF PARK AND BRUNSWICK AVENUES
CORNER OF PARK AND BRUNSWICK AVENUES
1400 PARK AVE
1601 LOWER RD
2650 MARSHES DOCK RD
3700 SOUTH WOOD AVE
4000 TREMLEY POINT ROAD
CORNER OF PARK AND BRUNSWICK AVENUES
CORNER OF PARK AND BRUNSWICK AVENUES
9 PEACH TREE HILL RD
875 VALLEY BROOK AVE
55 RAMAPO VALLEY RD
1000 EAST PARK AVE
100 W HUNTER AVE
100 W HUNTER AVE

Con-Lux Edison		NJ	08817-
DEEPWATER	Salem County	NJ	08023-
DEEPWATER	Salem County	NJ	08023-
DEEPWATER	Salem County	NJ	08023-
EAST HANOVER	Morris County	NJ	07936-1080
Edison	Middlesex County	NJ	08817-
EDISON	Middlesex County	NJ	08817-
EDISON	Middlesex County	NJ	08817-
EDISON	Middlesex County	NJ	08837-
Edison	Middlesex County	NJ	08817-
EDISON	Middlesex County	NJ	08818-3140
ELIZABETH	Union County	NJ	07207-
ELIZABETH	Union County	NJ	07202-
ELIZABETH	Union County	NJ	
Elmwood Park	Bergen County	NJ	07407-
FAIR LAWN	Bergen County	NJ	07410-
FARMINGDALE	Monmouth County	NJ	07727-
FIELDSBORO	Burlington County	NJ	08505-
Flanders		NJ	07836-
FORDS	Middlesex County	NJ	08863-
GIBBSTOWN	GLOUCESTER	NJ	08027-
GIBBSTOWN	GLOUCESTER	NJ	
GLOUCESTER CITY	CAMDEN	NJ	08030-
Hoboken		NJ	07030-
Jersey City	Hudson County	NJ	07304-
KEARNY		NJ	
KENILWORTH	Union County	NJ	07033-
KENILWORTH	Union County	NJ	07033-
LAKEWOOD	Ocean County	NJ	08701-
LAKEWOOD	Ocean County	NJ	08701-
Lawrence Township	Mercer County	NJ	08648-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
LINDEN	Union County	NJ	07036-
Livingston		NJ	07039-
LYNDHURST	Bergen County	NJ	07071-
MAHWAH	Bergen County	NJ	07430-
MAPLE SHADE	Burlington County	NJ	08052-
MAYWOOD	Bergen County	NJ	07607-
MAYWOOD	Bergen County	NJ	07607-

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2273	110000322614	325199	7443711	
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2283	110000322598	325611		NEINJT$1015
2284	110041022274	325211		
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2286	110021023569	325199	7443111	
2287	110000320117	325132		
2288	110006532332	493190	7200611	
2289	110006674928	325211	8095511	
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2305				
2306	110000322311	325180	7904511	
2307		325222		
2308	110013994552	325611	7477611	

RBH Dispersions
Fiabila USA, Inc.
John C Dolph Company (A VonRoll Company)
GIBRALTAR ROCK AT BELLE MEAD
Colgate-Palmolive Company
AMCOR FLEXIBLES INC
BUCKEYE PENNSAUKEN JCT
Givaudan Fragrances Corporation
Rhone-Poulenc
OHM Laboratories Inc. North Brunswick Facilit
OHM Laboratories Inc. New Brunswick Facility
Akcros Chemicals Inc.
E. R. Squibb and Sons, LLC
Buckeye Terminals, LLC - Newark Delancy Term
BENJAMIN MOORE & CO., INC.
ELAN CHEMICAL CO., INC.
Equistar Chemicals-Newark Plant
Hoechst Celanese
Deltech Resin Company
CARDOLITE CORPORATION
Troy Chemical
USA DETERGENTS INC
MEXICHEM SPECIALTY RESINS (FORMERLY: POLYONE CORP)
E.I. DuPont De Nemours & Company
Ashland Specialty Ingredients
Morton International
PLAINS PRODUCTS TERMINALS
COIM USA, Inc
NuStar Logistics, L.P.
PAULSBORO REFINING CO (FORM: VALERO)
Mexichem - Specialty Resins Inc.
Oxy Vinyls, LP
Bristol-Myers Squibb Company
Cook Composites and Polymers
Buckeye Terminals, LLC - Pennsauken Terminal
The Dow Chemical Company
SIEGFRIED USA, LLC
Chemtura Corporation
Amerada Hess Corp Perth Amboy Terminal Wharf
BUCKEYE PARTNERS
Buckeye Perth Amboy Terminal LLC
KINDER MORGAN LIQUID TERMIMALS, LLC
Buckeye Terminals, LLC - Raritan Bay Terminal
TMT Delaware River Wharf
AVANTOR (FORM:MALLINCKRODT)
SMITHKLINE BEECHAM PHARMACEUTICALS
COLGATE PALMOLIVE COMPANY

5 Factory Lane
114 IRON MOUNTAIN RD
320 NEW RD
COUNTY ROUTE 601
191 E HANOVER AVE
220 SHREVE ST
10 ELBOW LA
INTERNATIONAL TRADE CTR
120 JERSEY AVE
1385 LIVINGSTON AVE
14 TERMINAL RD
501 JERSEY AVE
One Squibb Drive
1111 Delancy Street
134 LISTER AVE
268 DOREMUS AVE
300 DOREMUS AVE
354 Doremus Newark? (Multiple addresses)
49 RUTHERFORD ST
500 DOREMUS AVE
ONE AVENUE L
1735 JERSEY AVE.
RT 130 & PORCUPINE RD
250 CHEESEQUAKE RD
50 SOUTH MINISINK AVE
335 MCLEAN BOULEVARD
3RD ST & BILLINGSPORT RD
675 BILLINGSPORT RD
7 NORTH DELAWARE ST
800 BILLINGSPORT RD
RT 130 & PORCUPINE RD
RT 130 & PORCUPINE RD
311 PENNINGTON-ROCKY HILL RD
820 SHERMAN AVENUE
BUCKEYE - PENNSAUKEN TERMINAL
THE DOW CHEMICAL COMPANY
33 INDUSTRIAL PARK RD
1000 Convery Blvd.
1250 State Street
380 MAUER RD
380 MAURER RD
920 STATE ST
BUCKEYE - RARITAN BAY TERMINAL
Foot of 36th Street
600 N BROAD ST
101 POSSUMTOWN RD
909 RIVER RD

Middlesex		NJ	08846-
MINE HILL, NJ 07803	Morris County	NJ	07803-
MONMOUTH JUNCTION	Middlesex County	NJ	08852-0267
MONTGOMERY		NJ	08558-
MORRISTOWN	Morris County	NJ	07962-1928
MOUNT HOLLY	Burlington County	NJ	08060-0158
MOUNT LAUREL, TOWNSHIP OF	Burlington County	NJ	08054-
MOUNT OLIVE	Morris County	NJ	07828-
New Brunswick	Middlesex County	NJ	08903-
NEW BRUNSWICK	Middlesex County	NJ	08902-
NEW BRUNSWICK	Middlesex County	NJ	08902-
NEW BRUNSWICK	Middlesex County	NJ	08901-3502
New Brunswick	Middlesex County	NJ	08903-
Newark	Essex County	NJ	07105-
NEWARK	Essex County	NJ	07105-
NEWARK	Essex County	NJ	07105-
NEWARK	Essex County	NJ	07105-
Newark	Essex County	NJ	07105-
NEWARK	Essex County	NJ	07105-
NEWARK	Essex County	NJ	07105-
Newark	Essex County	NJ	07105-
NORTH BRUNSWICK		NJ	08902-
OLDMANS, TOWNSHIP OF		NJ	
PARLIN	Middlesex County	NJ	08859-
PARLIN	Middlesex County	NJ	08859-
Paterson	PASSAIC	NJ	07504-
PAULSBORO	Gloucester County	NJ	08066-
PAULSBORO	Gloucester County	NJ	08066-
PAULSBORO	Gloucester County	NJ	08066-
PAULSBORO	Gloucester County	NJ	08066-
PEDRICKTOWN	Salem County	NJ	08067-0400
PEDRICKTOWN	Salem County	NJ	08067-0411
PENNINGTON	Mercer County	NJ	08534-5400
Pennsauken	Camden County	NJ	08110-
PENNSAUKEN	Camden County	NJ	08110-
PENNSAUKEN	Camden County	NJ	08110-
PENNSVILLE	Salem County	NJ	08070-
Perth Amboy	Middlesex County	NJ	08861-
PERTH AMBOY	Middlesex County	NJ	08861-
PERTH AMBOY	Middlesex County	NJ	08861-
PERTH AMBOY	Middlesex County	NJ	08861-
PERTH AMBOY	Middlesex County	NJ	08861-
PERTH AMBOY	Middlesex County	NJ	08861-
PETTY'S ISLAND		NJ	
PHILLIPSBURG	Warren County	NJ	08865-
PISCATAWAY	Middlesex County	NJ	08854-
Piscataway Twp	Middlesex County	NJ	08855-

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2314	110041124949	325510	7493111	
2315	110000867152	333293		
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2319	110000319174	325510	7903611	
2320	110000581978	325613	7990911	
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2322	110000867642	325412	7463511	
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2337	110021357379	325180	6673711	
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2352	110001570675	4883		
2353	110015745443	325192		
2354	110007997953	326113	8503811	

MERCK SHARP & DOHME CORP (RAHWAY)
Merck Sharp & Dohme Corp - Rahway, New Jersey
Merck Sharp & Dohme Corp - Rahway, New Jersey
ORTHO CLINICAL DIAGNOSTICS, INC.
Shell - Sewaren Terminal
AKZO NOBEL COATING INC
RUST-OLEUM CORPORATION
AGFA CORPORATION
AMES ADVANCED MATERIALS CORP.
FLUID INK TECH INC
SOLVAY SOLEXIS
INTERNATIONAL PAINT, INC
BASF Corporation
Clifton Adhesive, Inc.
LTS Lohmann Therapy Systems Corp.
Johnson Matthey Inc West Deptford Site
Coim USA Inc.
SUNOCO (R&M) EAGLE POINT FACILITY
SUNOCO INC (R&M) EAGLE POINT FACILITY
DUP OF NJ0000003402318046
BUCKEYE PORT READING TERMINAL LLC.
Kirtland Air Force Base
Navajo Refining - Artesia Refinery
BLOOMFIELD REFINERY
Gallup Refinery
Lovington Refinery
MAGIC STEAM CLEANERS
BATTLE MOUNTAIN FACILITY
BARRICK GOLDSTRIKE OXYGEN PLANT
CARLIN SODIUM CYANIDE TERMINAL
TAIYO AMERICA, INC.
DAYTON
CARBOLINE COMPANY
ITS -NEVADA TERMINAL, INC
EAGLE SPRINGS REFINERY
ESSENTIAL INDUSTRIES WEST, INC
WESTERN EMULSION PLANT
GARDNERVILLE
PPG INDUSTRIES, INC.
Sun Chemical - Reno
TRW VSSI
WINNEMUCCA PLANT
Saint Gobain Corp Advanced Ceramics
LANDER CO INC
Bayside Fuel Oil Depot Corp Bensonhurst Terminal
BUFFALO COLOR CORP - LEE ST PLANT
E I DUPONT YERKES PLANT

126 E LINCOLN AVE
MERCK SHARP & DOHME CORP
MERCK SHARP & DOHME CORP
RT 202 NORTH
111 State St
100 BELMONT DR
173 BELMONT DR
50 MEISTER AVE
3900 S CLINTON AV
4301-A NEW BRUNSWICK AVE.
10 LEONARDS LN
2270 MORRIS AVE
2 PLEASANT VW AVE
48 Burgess Place
21 HENDERSON DR
2003 NOLTE DR
286 MANTUA GRV RD
I-295 & RT 130
I-295 & RT 130
400 BLAIR ROAD
750 CLIFF RD
2000 WYOMING BLVD NE
501 E Main St
1/4 MILE S OF BLOOMFIELD
17 miles E of Gallup on I-40
5 mi S of Lovington on NM 18
301 WEST 7TH
Rennox, 6 mi. N & 2 mi. E of Btl Mtn off NV-806 & Blossom Ranch Rd.
27 mi N of Carlin, off SR 766
Vivian Siding, 1.5 mi east, off the frontage road, Chestnut St, 3 mi E of Carlin
2675 Antler Dr
20 Enterprise Way
95 AIRPARK VISTA BLVD
230 Dunphy Rd
Eagle Springs Refinery, 10 mi SW of Currant on Hwy 6, Railroad Valley
15 Salvadore Dr
1891 Duffy Rd
1198 Mark Circle, off Sawmill Rd
500 Pittsburgh Ave
7970 Security Circle
1 TRW WAY
5505 Cyanco Dr
168 Creekside Dr.
100 ELDREDGE ST.
1776 Shore Parkway
100 LEE ST
3115 RIVER RD

RAHWAY	Union County	NJ	
RAHWAY	Union County	NJ	07065-2000
RAHWAY	Union County	NJ	07065-2000
RARITAN	Somerset County	NJ	08869-
SEWAREN		NJ	07077-
SOMERSET	Somerset County	NJ	08873-
SOMERSET	Somerset County	NJ	08875-
SOMERVILLE	SOMERSET	NJ	
SOUTH PLAINFIELD	Middlesex County	NJ	07080-
SOUTH PLAINFIELD	Middlesex County	NJ	07080-
THOROFARE	Gloucester County	NJ	08086-
UNION	Union County	NJ	07083-
WASHINGTON	Warren County	NJ	07882-
Wayne	Passaic County	NJ	07470-
WEST CALDWELL	Essex County	NJ	07006-
WEST DEPTFORD	Gloucester County	NJ	08066-
WEST DEPTFORD	Gloucester County	NJ	08066-
WEST DEPTFORD, TOWNSHIP OF	Gloucester County	NJ	08093-
WEST DEPTFORD, TOWNSHIP OF		NJ	
WOODBRIDGE	Middlesex County	NJ	07001-
WOODBRIDGE	Middlesex County	NJ	07095-
Albuquerque	BERNALILLO	NM	87112-
Artesia	Eddy County	NM	88210-
BLOOMFIELD		NM	
Gallup	McKinley County	NM	87301-
Lovington	Lea County	NM	88260-
NEW MEXICO		NM	
BATTLE MOUNTAIN	Lander County	NV	89820-
CARLIN	Eureka County	NV	89822-
CARLIN	Elko County	NV	89822-
CARSON CITY	Carson city City	NV	89701-
DAYTON	Lyon County	NV	89403-
DAYTON	Lyon County	NV	89403-
DUNPHY	Eureka County	NV	89631-
ELY	Nye County	NV	89301-
FERNLEY	Lyon County	NV	89408-
FERNLEY	Lyon County	NV	89408-
GARDNERVILLE	Douglas County	NV	89410-
MCCARRAN	Storey County	NV	89434-
Reno		NV	89506-0490
SPARKS	WASHOE	NV	89434-
WINNEMUCCA	Humboldt County	NV	89445-
Amherst	Erie County	NY	14228-
BINGHAMTON		NY	13901-
Brooklyn	KINGS	NY	11214-
BUFFALO	Erie County	NY	
BUFFALO	Erie County	NY	14150-

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38.925030	-119.698470
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2364	110000326594	325199	7762511	
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2378	110000809019	325992		
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2381	110000324382	325211	8107111	
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2389	110000325675	325411	7435611	
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2391	110004445798			
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2393	110000326718	3251	7811811	
2394	110000324435	325211	8123911	
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2397	110000392058	325211	8008211	
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2400	110012253881	325211	7328411	
2401	110000389231	325510	7327511	

PVS CHEMICALS
HENKEL CORPORATION
NORLITE LLC
Potter Paint Co., Inc.
CPS CORP
CRESCENT MARKETING (DBA CRESCENT MFG)
Columbia Cement
ELT HARRIMAN LLC (FORMERLY NEPERA INC)
EPIC PHARMA LLC
VANDEMARK CHEMICAL INC
New York City Police Harbor Unit Launch Repair S
Niacet Corporation
OCCIDENTAL CHEMICAL CORP NIAGARA PLANT
DUREZ NIAGARA
GOODYEAR CHEM PLANT
EI DUPONT DE NEMOURS & CO INC NIAGARA FALLS PLANT
WYETH PHARMACEUTICALS
BASF CORP
ARKEMA INC
AMRI RENSSELAER
ARCH CHEMICALS INC
CARESTREAM HEALTH AT EASTMAN BUSINESS PARK
EASTMAN BUSINESS PARK (CMS MEGA/OPER)
MONROE COMMUNITY COLLEGE
Eastman Kodak Company
Kodak
SI GROUP INC - ROTTERDAM JUNCT FACIL
Sartomer Company
WYETH PHARMACEUTICALS
VON ROLL USA INC
SABIC INNOVATIVE PLASTICS US LLC
PAR PHARMACEUTICAL INC
GENERAL CHEMICAL LLC
Strathmore Products, Incorporated
BRISTOL-MYERS SQUIBB COMPANY
Eastman Kodak
Ciba Speciality Chemical Corporation (Ciba SC)
3M TONAWANDA
FMC Corp Tonawanda Plant
MOMENTIVE PERFORMANCE MATERIALS
HAMPSHIRE CHEMICAL CORP/EVANS CHEMETICS
XEROX JOSEPH C WILSON CTR FOR TECHNOLOGY
INEOS ABS (USA) CORPORATION
S. I. A. ADHESIVES, INC.
A. Schulman, Inc. - Exeter (1677011002)
OMNOVA Solutions Inc. (1677010195)
Akron Paint and Varnish (1677010028)

55 LEE ST
710 OHIO ST
628 S SARATOGA ST
21 Crawford Street
3257 MIDDLE RD.
8800 S. MAIN ST.
159 HANSE AVE
41 ARDEN HOUSE RD
227-15 N CONDUIT AVE
1 NORTH TRANSIT RD
Wards Island
400 47TH ST
4700 BUFFALO AVENUE
5000 PACKARD RD
5500 GOODYEAR DR
BUFFALO AVE & 26TH ST
401 N MIDDLETOWN RD
1057 LOWER SOUTH ST
ST RTE 63 - N SIDE - W OF RIVER
33 RIVERSIDE AVE
100 MCKEE RD
1049 W RIDGE RD
1999 LAKE AVE
343 STATE ST
1000 MAIN ST (ST RTE 5S)
Unable to locate
64 MAPLE ST
200 VON ROLL DR
1 NORYL AVE
1 RAM RIDGE RD
1421 WILLIS AVE
1970 W FAYETTE ST
6000 THOMPSON RD
Unable to locate
711 OLD SAW MILL RIVER RD
305 SAWYER AVE
35 Sawyer Ave.
260 HUDSON RIVER RD
228 E MAIN ST
800 PHILLIPS RD
356 THREE RIVERS PARKWAY
123 WEST BARTGES STREET
1353 EXETER ROAD
1380 Techway Dr Bldg 119
1390 Firestone Parkway

BUFFALO	Erie County	NY	14210-
BUFFALO	Erie County	NY	14203-
COHOES	Albany County	NY	12047-
Cortland	CORTLAND	NY	13045-3280
DUNKIRK		NY	14048-
EDEN		NY	14057-
Freeport	NASSAU	NY	11520-
HARRIMAN	ORANGE	NY	
LAURELTON	Queens County	NY	11413-
LOCKPORT	Niagara County	NY	14094-
Manhattan, Randalls		NY	
Niagara Falls	Niagara County	NY	14304-
NIAGARA FALLS	Niagara County	NY	14302-
NIAGARA FALLS	Niagara County	NY	14302-
NIAGARA FALLS	Niagara County	NY	
NIAGARA FALLS	Niagara County	NY	14302-
PEARL RIVER	Rockland County	NY	10965-
PEEKSKILL	Westchester County	NY	10566-
PIFFARD	Livingston County	NY	14533-
RENSSELAER	Rensselaer County	NY	12144-
ROCHESTER	Monroe County	NY	14611-
ROCHESTER	Monroe County	NY	14615-
ROCHESTER	Monroe County	NY	14650-
ROCHESTER	Monroe County	NY	
Rochester	Monroe County	NY	
Rochester	Monroe County	NY	
ROTTERDAM JUNCTION	Schenectady County	NY	12150-
Rotterdam Junction	Schenectady County	NY	
ROUSES POINT	Clinton County	NY	12979-
SCHENECTADY		NY	12306-
SELKIRK	Albany County	NY	12158-
SPRING VALLEY	Rockland County	NY	10977-
SYRACUSE	Onondaga County	NY	13204-
Syracuse	Onondaga County	NY	13204-
SYRACUSE	Onondaga County	NY	13221-
Syracuse	Onondaga County	NY	
Tarrytown		NY	10591-
TONAWANDA	Erie County	NY	14150-
Tonawanda	Erie County	NY	14150-7716
WATERFORD	Saratoga County	NY	12188-
WATERLOO	Seneca County	NY	13165-
WEBSTER	Monroe County	NY	14580-
ADDYSTON	Hamilton County	OH	45001-
AKRON	Summit County	OH	44311-1081
Akron	Summit County	OH	44306-
Akron	Summit County	OH	44306-
Akron	Summit County	OH	44301-

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2413	110000385011	325180	8117111	
2414	110000385084	325211		
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2418	110041418338	325211	13437011	
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2420	110001630272	325998	8363211	
2421	110032895357	325180	8130611	
2422	110030900997	325212		
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2424	110054242707	325510	14718011	
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2431	110000500235	325180	8101611	
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2446	110001626125	325910	14758511	
2447	110000500191	32551		
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GOODYEAR TIRE & RUBBER CO - PLANT 5 (1677010196)
Cargill, Incorporated - Salt Division (Akron, OH) (1677010027)
THE RUSCOE COMPANY, PLANT II
EMERALD POLYMER ADDITIVES, LLC
Firestone Polymers (1677010000)
STAR BRONZE INC.
ASHLAND LLC
CRISTAL USA INC., ASHTABULA COMPLEX PLANT 2
CRISTAL USA INC., ASHTABULA COMPLEX PLANT 1
Cristal USA Inc., Ashtabula Complex Plant 1 (0204010200)
MFG, COMPOSITE SYSTEMS
Ashta Chemicals Inc. (0204010056)
Ashland Chemical Inc
LUBRIZOL ADVANCED MATERIALS (0247030004)
FORD MOTOR COMPANY - OHIO ASSEMBLY PLANT
PPG - NORTH PLANT
PPG - South Plant (1677020162)
PPG - Teslin (1677020164)
Sherwin-Williams Diversified Brands Bedford Hts
Orion Engineered Carbons LLC (0684010049)
KRATON POLYMERS U.S. LLC
Kraton Polymers U.S. LLC (0684010011)
International Paint LLC (1318067810)
Valero Renewable Fuels Company, LLC (0124000132)
H.B. Fuller Company
H.B. Fuller Co. (1431052206)
Fibre Glass-Evercoat (1431053385)
Chemron Corp Bowling Green Plant
Vesuvius USA Corporation - CD (1318126134)
Chemtrade Logistics Inc (0302000001)
Colgate-Palmolive Co
HARRISON PAINT CO
MARATHON PETROLEUM COMPANY LLC CANTON REFINERY
MPLX TERMINALS LLC - CANTON TERMINAL
Buckeye Terminals, LLC - CANTON TERMINAL (1576050275)
SCOT LABS
P. H. GLATFELTER COMPANY - CHILLICOTHE FACILITY
SUN CHEMICAL CORP CINCINNATI INK (1431480237)
Patheon Pharmaceuticals Inc. (1431380503)
Hilton Davis
Kao USA Inc. (1431070624)
Phthalchem
FORD MOTOR COMPANY
MARATHON PETROLEUM CO LLC CINCINNATI OH TERMINAL
FLINT GROUP PIGMENTS (1431483219)
BONDO/MAR-HYDE CORPORATION
CINCINNATI RENEWABLE FUELS, LLC

1452 E ARCHWOOD AVENUE
2065 Manchester Road
219 E. MILLER AVENUE
240 WEST EMERLING AVENUE
381 W WILBETH ROAD
BOX 2206 (803 SOUTH MAHONING AVENUE)
1745 COTTAGE STREET
2426 MIDDLE ROAD
2900 MIDDLE ROAD
2900 Middle Road
2925 MFG PLACE
3509 Middle Road
4501 Benefit Ave
550 MOORE RD
650 MILLER ROAD
4829 Fairland Road
PPG Industries, Inc.
PPG Industries, Inc.
26300 Fargo Avenue
11135 State Route 7
2419 STATE ROUTE 618
2419 State Route 618
640 NORTH ROCKY RIVER DR.
3979 State Route 238 NE
4440 MALSBURY ROAD
4440/4450 MALSBARY RD
6600 Cornell Road
1142 N. Main St.
20200 SHELDON ROAD
7680 Ottawa Rd.
8800 Guernsey Indl. Blvd.
1329 HARRISON AVE SW
2408 GAMBRINUS AVENUE SW
2419 GAMBRINUS AVENUE SW
807 HARTFORD AVE
16841 PARK CIRCLE DR.
232 EAST 8TH ST.
12049 CENTRON PLACE
2110 East Galbraith Rd
2235 LANGDON FARM ROAD
2535 Spring Grove Avenue
266 West Mitchell Ave
3000 SHARON ROAD
4015 RIVER ROAD
410 GLENDALE-MILFORD ROAD
4677 DEVITT DRIVE
4700 ESTE AVENUE

Akron	Summit County	OH	44306-
Akron	Summit County	OH	44314-1770
AKRON	Summit County	OH	44301-
AKRON	Summit County	OH	44301-
AKRON	Summit County	OH	44301-
ALLIANCE	STARK	OH	44601-
ASHLAND	Ashland County	OH	44805-
ASHTABULA	Ashtabula County	OH	44004-
ASHTABULA	Ashtabula County	OH	
Ashtabula	Ashtabula County	OH	44004-
ASHTABULA	Ashtabula County	OH	44004-
Ashtabula	Ashtabula County	OH	44004-
Ashtabula	Ashtabula County	OH	44004-
Avon Lake	Lorain County	OH	44012-
AVON LAKE	Lorain County	OH	44012-0000
BARBERTON	Summit County	OH	44203-
Barberton	Summit County	OH	44203-3913
Barberton	Summit County	OH	44203-3913
Bedford Heights	Cuyahoga County	OH	44146-
Belpre	Washington County	OH	45714-9496
BELPRE	Washington County	OH	45714-0235
Belpre	Washington County	OH	45714-0235
Berea	Cuyahoga County	OH	44017-
Bloomingburg	Fayette County	OH	43106-
Blue Ash	Hamilton County	OH	45242-
BLUE ASH	Hamilton County	OH	45242-
Blue Ash	Hamilton County	OH	45242-
Bowling Green	Wood County	OH	43402-
Brook Park	Cuyahoga County	OH	44142-
Cairo	Allen County	OH	45820-0310
Cambridge	Guernsey County	OH	43725-
CANTON	Stark County	OH	44706-
CANTON	Stark County	OH	44706-
CANTON	Stark County	OH	
Canton	Stark County	OH	44707-
CHAGRIN FALLS	GEAUGA	OH	44023-
CHILLICOTHE	Ross County	OH	45601-
CINCINNATI	Hamilton County	OH	45246-
Cincinnati	Hamilton County	OH	45237-
Cincinnati	Hamilton County	OH	45237-
Cincinnati	Hamilton County	OH	45214-1773
Cincinnati	Hamilton County	OH	45232-
CINCINNATI	Hamilton County	OH	45241-
CINCINNATI	Hamilton County	OH	45204-
Cincinnati	Hamilton County	OH	45215-
CINCINNATI	Hamilton County	OH	45246-
CINCINNATI	Hamilton County	OH	45232-

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Grace Davison Cincinnati Plant / Solvay USA, Inc. (1431070001)
Grace Davison Cincinnati Plant / Solvay USA, Inc. (1431070001)
BASF CORP
BASF Corp (1431070035)
PMC SPECIALTIES GROUP, INC. (formerly Cincinnati Specialities)
Teva Women's Health (1431072038)
BUCKEYE TERMINALS LLC CINCINNATI TERMINA (1431073227)
St. Bernard Soap Company (1431394137)
The Procter and Gamble Co. (1431390903)
THE PROCTER & GAMBLE CO - IVORYDALE FOOD PLANT
COLOR RESOLUTIONS INTL
BUILDERS FIRST SOURCE INC
KEEBLER COMPANY
PPG INDUSTRIES - ERU
DuPont-Circleville (0165010004)
Euclid Chemical Company
Arc Terminals Holdings, LLC (1318005897)
MCGEAN-ROHCO INC 130130
SRC WORLDWIDE Inc. (1318001732)
CHEMICAL SOLVENTS, INC.
PPG INDUSTRIES, INC. - CLEVELAND
FERRO CORPORATION - CLEVELAND FRIT PLANT (1318170235)
TREMCO INC. - MAMECO DIVISION (1318002813)
DAY-GLO COLOR CORP.
Cansto Coatings LLC (1318008350)
Akzo Nobel Coatings Inc.
PLASKOLITE, LLC.
BOEHRINGER INGELHEIM ROXANE INC (0125041763)
Yenkin-Majestic
Georgia Pacific Chemicals LLC (0125040904)
FRANKLIN INTERNATIONAL
Sherwin-Williams Columbus
Buckeye Terminals LLC - Columbus South Terminal (0125040239)
CAPITAL RESIN CORP (0125040238)
BUCKEYE TERMINALS LLC - COLUMBUS EAST (0125040138)
Sunoco., Midwest Terminal (0125040580)
Calgon Carbon Corp. (0125040716)
Gfs Chemicals Inc
EVANS ADHESIVE CORP LTD
Ashland Chemical Incorporated
GENERAL ELECTRIC COMPANY, D/B/A GE ELECTROMATE
CE Acquisition Company LLC (0616010087)
Research Organics Inc.dba SAFC Cleveland (1318172081)
Buckeye Terminals LLC - Cuyahoga Terminal (1318170183)
TATE & LYLE, DAYTON
Rubber Seal (0857733184)
PPG INDUSTRIES - DELAWARE

4775 Paddock Rd.
4775 Paddock Rd.
4900 ESTE AVENUE
4900 Este Avenue
501 MURRAY ROAD
5040 Duramed Drive
5150 River Rd
5177 Spring Grove Avenue
5201 Spring Grove Avenue
5204 SPRING GROVE AVENUE
630 GLENDALE-MILFORD RD.
7600 COLERAIN AVENUE
ONE TRADE STREET
559 PITTSBURGH ROAD
800 DuPont Road
19218 REDWOOD RD
250 MAHONING AVE
2910 HARVARD AVE
3425 SERVICE RD
3751 JENNINGS ROAD
3800 WEST 143RD STREET
4150 East 56th Street
4475 EAST 175TH ST.
4515 SAINT CLAIR AVENUE
9320 WOODLAND AVE
1313 Windsor Avenue
1770 JOYCE AVENUE
1809 WILSON RD
1920 LEONARD AVENUE
1975 Watkins Road
2020 BRUCK STREET
2121 New World Drive
303 WILSON ROAD
324 DERING AVENUE
3651 FISHER RD
3866 Fisher Rd
835 N. Cassady Ave.
851 Mckinley Ave.
925 OLD HENDERSON RD
802 HARMON AVE
1350 S. SECOND ST.
18137 County Line Road 271
4353 East 49th Street
4800 E 49 ST
5600 BRENTLINGER DR.
5751 N. WEBSTER STREET
760 PITTSBURGH DRIVE

Cincinnati	Hamilton County	OH	45229-
Cincinnati	Hamilton County	OH	45229-
CINCINNATI	Hamilton County	OH	45232-
Cincinnati	Hamilton County	OH	45232-1491
Cincinnati	Hamilton County	OH	45217-
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CINCINNATI	Hamilton County	OH	45217-
CINCINNATI	Hamilton County	OH	45215-
CINCINNATI	Hamilton County	OH	
CINCINNATI	Hamilton County	OH	45227-
CIRCLEVILLE	Pickaway County	OH	43113-
Circleville	Pickaway County	OH	43113-9107
Cleveland	Cuyahoga County	OH	44110-
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CLEVELAND	Cuyahoga County	OH	44105-3010
Cleveland	Cuyahoga County	OH	44111-
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Cleveland	Cuyahoga County	OH	44101-1550
CLEVELAND	Cuyahoga County	OH	44128-
CLEVELAND	Cuyahoga County	OH	44103-
Cleveland	Cuyahoga County	OH	44104-
Columbus	Franklin County	OH	43211-2898
COLUMBUS	Franklin County	OH	43219-1026
COLUMBUS	Franklin County	OH	43216-
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Columbus	Franklin County	OH	43207-
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COLUMBUS	Franklin County	OH	43207-
COLUMBUS	Franklin County	OH	43228-
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Columbus	Franklin County	OH	43222-
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Columbus	Franklin County	OH	43223-
COSHOCTON	Coshocton County	OH	43812-1979
Coshocton	Coshocton County	OH	43812-
Cuyahoga Heights	Cuyahoga County	OH	44125-
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DAYTON	Montgomery County	OH	45414-3597
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DELAWARE	Delaware County	OH	43015-

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Dover Chemical Corp (0679010132)
ARIZONA CHEMICAL COMPANY, LLC (formerly Union Camp)
TransMontaigne Operating Company, L.P. (0215020249)
Buckeye Terminals, LLC - Lorain Terminal (0247000023)
BASF Corporation (0247040195)
3M Elyria (0247040822)
Continental Products
TEDIA COMPANY INC (1409030683)
American Inks and Coatings (1409030956)
EQUISTAR CHEMICALS, LP
POET Biorefining - Fostoria (0374010235)
KRAFT HEINZ COMPANY
Third Dimension, Inc. (0204030449)
BASF CORPORATION
Andersons Marathon Ethanol LLC (0819750245)
UNIVAR USA INC - HAMILTON BRANCH
ALTIVIA PETROCHEMICALS, LLC
BAYER MATERIALSCIENCE (0145020221)
ECOLAB INC
CLEAN HARBORS RECYCLING SERVICES OF OHIO L.L.C.
AKZO NOBEL COATINGS INC (formerly The Glidden Company)
HONEYWELL INTL INC
Americas Styrenics (0744000173)
Summit Ethanol dba POET Biorefining - Leipsic (0369000051)
LINDE GAS NORTH AMERICA, LLC
LINDE GAS NORTH AMERICA, LLC
LIMA REFINING COMPANY
FORD MOTOR CO.-LIMA
ISP
Buckeye Terminals LLC - Lima South Terminal (0302020034)
FORT AMANDA SPECIALTIES LLC
INEOS BAREX USA LLC
PCS Nitrogen Ohio, L.P. (0302020370) / INEOS USA LLC (0302020371)
PCS Nitrogen Ohio, L.P. (0302020370) / INEOS USA LLC (0302020371)
Ineos USA LLC (0302020015)
PROCTER & GAMBLE MFG CO (0302020260)
SOLVAY SPECIALTY POLYMERS USA, L.L.C.
Solvay Specialty Polymers USA, L.L.C. (0684020008)
AMERICAS STYRENICS, LLC
POET Biorefining - Marion (0351010207)
International Paper- Marysville Ink (0180010416)
The Scotts Co. (0180010008)
PARKER HANNIFIN, HPD
Quest Automotive Products (1576131795)
SPARTAN CHEMICAL CO INC
SUN CHEMICAL GPI
Anatrace Products, LLC (0448031070)

3676 Davis Rd. NW
875 HARGER STREET
425 RIVER RD
12545 AVON BELDON ROAD
120 PINE STREET
1301 Lowell st.
1150 EAST 222 STREET
1000 Tedia Way
575 QUALITY BLVD
110 THIRD STREET
2111 Sandusky Street
1200 N. FIFTH STREET
633 Pleasant Ave
1175 MARTIN STREET
5278 SEBRING WARNER RD
12 STANDEN DRIVE
1019 HAVERHILL-OHIO FURNACE ROAD
1111 ONeill Drive SE
383 N. HIGH ST.
581 MILLIKEN DRIVE, S.E.
300 Sprowl Rd.
3330 S. 3RD ST.
925 County Road
3875 State Route 65
1150 SOUTH METCALF ST
1150 SOUTH METCALF ST
1150 SOUTH METCALF STREET
1155 BIBLE ROAD
1220 SOUTH METCALF STREET
1500 W. Buckeye Road
1747 Fort Amanda Rd.
1900 FORT AMANDA RD.
1900 Fort Amanda Rd.
1900 Fort Amanda Rd.
Fort Amanda And Adgate Roads P.O Box 628
MUMAUGH & RESERVOIR RD
17005 STATE ROUTE 7
17005 State Route 7
17401 STATE ROUTE SEVEN SOUTH
Hillman-Ford Road
13307 Industrial Parkway
14111 Scottslawn Road
14249 INDUSTRIAL PARKWAY
600 NOVA DRIVE S.E.
1110 SPARTAN DR.
1380 FORD RD.
434 W Dussel Dr

Dover	Tuscarawas County	OH	44622-
Dover	Tuscarawas County	OH	44622-
East Liverpool	Columbiana County	OH	43920-
Eaton Twp.	Lorain County	OH	44044-
Elyria	Lorain County	OH	44035-
Elyria	Lorain County	OH	44035-4864
Euclid	CUYAHOGA	OH	44117-
Fairfield	Butler County	OH	45014-
Fairfield	Butler County	OH	45014-
FAIRPORT HARBOR	Lake County	OH	44077-
Fostoria	Seneca County	OH	44830-
FREMONT	Sandusky County	OH	43420-
Geneva	Ashtabula County	OH	44041-
GREENVILLE	Darke County	OH	45331-
Greenville	Darke County	OH	45331-
HAMILTON	BUTLER	OH	
HAVERHILL	Scioto County	OH	45636-0127
Hebron	Licking County	OH	43025-
HEBRON	Licking County	OH	43025-
HEBRON	Licking County	OH	43025-9687
Huron	ERIE	OH	44839-
IRONTON	LAWRENCE	OH	45638-
Ironton	Lawrence County	OH	45638-
Leipsic	Putnam County	OH	45856-
Lima	Allen County	OH	45805-
Lima	Allen County	OH	45805-
LIMA	Allen County	OH	45804-
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LIMA	Allen County	OH	45804-
Lima	Allen County	OH	45802-0628
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MARIETTA	Washington County	OH	45750-
Marietta	Washington County	OH	45750-
MARIETTA	Washington County	OH	45750-
Marion	Marion County	OH	43302-
Marysville	Union County	OH	43040-
Marysville	Union County	OH	43041-
MARYSVILLE	Union County	OH	43040-
Massillon	Stark County	OH	44648-0709
MAUMEE	Lucas County	OH	43537-
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Valspar / Plasti-kote (1652050060)
REPUBLIC POWDERED METALS (1652050077)
RPM, Incorporated
Aexcel Corporation
HENKEL CONSUMER ADHESIVES, INC.
AVERY DENNISON CORPORATION FASSON ROLL N. AMERICA B22
ALDRICH CHEMICAL COMPANY, LLC (0857781883)
VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
OMNOVA Solutions Inc. (1667000007)
Royster-Clark Inc
Ohio Oil Gathering II, LLC. - Black Run Terminal (0660000236)
GE WATER & PROCESS TECHNOLOGIES
Ohio Oil Gathering II, LLC - Bells Run Terminal (0684000149)
Buckeye Terminals LLC - Warren Terminal (0278060355)
Agrium North Bend Nitrogen Operations (1431350064)
E.I. Du Pont Fort Hill Plant (1431350817)
PPG INDUSTRIES, INC.
Church & Dwight Co. (0374000022)
Chemtrade Refinery Solutions Limited Partnership (0448020014)
TOLEDO REFINING COMPANY, LLC.
BP-HUSKY REFINING LLC
PET PROCESSORS, L.L.C.
THE LUBRIZOL CORPORATION
NOVA CHEMICALS INC (0243000012)
ARVESTA CORP
Bulk Molding Compounds, Inc. (0387040001)
American Centrifuge Operating, LLC (0666000000)
Fluor-B&W Portsmouth LLC (0666005004)
Spectrum Dispersions, Inc. (1667060140)
PMC CINCINNATI, INC.
POLYNT COMPOSITES USA, INC (formerly CCP Composites US LLC)
Ashland Services Co South Point Dock
MORGAN ADHESIVES COMPANY (MACTAC)
AKZO NOBEL PAINTS LLC, WEST BLDG (formerly ICI Paints North America)
UNIVAR USA INC.
DAP INC.
SUNOCO PARTNERS MARKETING & TERMINALS LP TOLEDO TERM
BTL Speciality Resins
Buckeye Terminals LLC - Toledo West Terminal (0448010067)
ARC TERMINALS HOLDINGS LLC (0448010123)
CANBERRA CORP
UNIVAR USA, INC.
HA INTERNATIONAL LLC (0448011215)
FCA US LLC - TOLEDO NORTH ASSEMBLY
PERSTORP POLYOLS, INC.
GOODRICH CORP
Continental Structural Plastics (0381020017)

1000 LAKE RD
2628 PEARL RD
2628 Pearl Road
7373 Production Drive
7405 PRODUCTION DRIVE
8080 NORTON PARKWAY
3858 BENNER RD.
4301 INFIRMARY ROAD
165 S. CLEVELAND AVENUE
249 W. Chestnut St.
9320 Black Run Road
2118 Reiser Ave. S.E.
34670 State Route 7
1001 YOUNGSTOWN WARREN RD
10743 Brower Rd.
11215 Brower Rd
4829 FAIRLAND RD
2501 East County Road 34
1400 Otter Creek Road
1819 WOODVILLE ROAD
4001 CEDAR POINT ROAD
1350 BACON ROAD
155 FREEDOM ROAD
786 HARDY RD
3647 SHEPARD RD.
12600 Eckel Road
3930 U.S. Route 23 South
3930 U.S. Route 23 South
225 W Lake St
2000 WEST STREET
1321 FIRST ST
County Highway 1
4560 DARROW ROAD
16651 SPRAGUE RD
21600 DRAKE RD.
875 NORTH THIRD STREET
1601 WOODVILLE ROAD
2112 SYLVAN AVE.
2450 HILL AVENUE
2844 N SUMMIT ST
3610 HOLLAND-SYLVANIA RD.
4051 SOUTH AVE.
4243 SOUTH AVE
4400 CHRYSLER DRIVE
600 MATZINGER ROAD
101 WACO ST
1276 Industrial Drive

Medina	Medina County	OH	44256-3598
Medina	Medina County	OH	44256-
Medina	Medina County	OH	44258-
Mentor	Lake County	OH	44060-
MENTOR	Lake County	OH	44060-
MENTOR	Lake County	OH	
Miamisburg	Montgomery County	OH	45342-
MIAMISBURG	Montgomery County	OH	45342-1278
Mogadore	Portage County	OH	44260-
Mount Sterling	Madison County	OH	43143-
Nashport	Muskingum County	OH	43830-
New Philadelphia	Tuscarawas County	OH	44663-
Newport	Washington County	OH	45768-
Niles	Trumbull County	OH	44446-
North Bend	Hamilton County	OH	45052-0158
North Bend	Hamilton County	OH	45052-
NORTON	SUMMIT	OH	
Old Fort	Seneca County	OH	44861-
Oregon	Lucas County	OH	43616-1232
OREGON	Lucas County	OH	43616-
OREGON	Lucas County	OH	43697-
PAINESVILLE	Lake County	OH	44077-4781
PAINESVILLE	Lake County	OH	44077-1234
Painesville	Lake County	OH	44077-
PERRY		OH	44081-
Perrysburg	Wood County	OH	43551-
Piketon	Pike County	OH	45661-0628
Piketon	Pike County	OH	45661-
Ravenna	Portage County	OH	44266-
READING	Hamilton County	OH	45215-
SANDUSKY	ERIE	OH	44870-
South Point		OH	45680-
STOW	Summit County	OH	44224-
Strongsville	Cuyahoga County	OH	44136-
STRONGSVILLE	Cuyahoga County	OH	44149-
TIPP CITY	Miami County	OH	45371-3014
TOLEDO	Lucas County	OH	43605-
Toledo	Lucas County	OH	43606-
TOLEDO	Lucas County	OH	43607-
TOLEDO	Lucas County	OH	43611-
TOLEDO	Lucas County	OH	43615-
TOLEDO	Lucas County	OH	43615-
TOLEDO	Lucas County	OH	43615-
TOLEDO	Lucas County	OH	
TOLEDO	Lucas County	OH	43612-
TROY	Miami County	OH	30640-
Van Wert	Van Wert County	OH	45891-2466

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41.200280	-81.841670
41.670890	-81.360390
41.669840	-81.358960
41.648100	-81.352140
39.615100	-84.243100
39.683840	-84.275660
41.046670	-81.381390
39.717490	-83.417770
40.097390	-82.169990
40.454440	-81.403610
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40.997313	-81.620004
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41.632800	-83.501900
41.679167	-83.449722
41.773890	-81.206950
41.720278	-81.273611
41.759670	-81.229640
41.748759	-81.155122
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41.350710	-81.816250
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41.633148	-83.503172
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41.683910	-83.683330
41.630850	-83.637630
41.616660	-83.633330
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41.702662	-83.530910
40.022610	-84.222400
40.846110	-84.592780

2587	110000814691	32591		
2588	110000394494	325520	7319411	
2589	110046578342	325412	14722111	
2590	110000388198	325998		
2591	110000386225	325199	8149411	
2592	110000386305			
2593	110000394500	32551		
2594	110009662338	325180	16975911	
2595	110021102386	486110	8007711	
2596	110010493885	486110	1024611	
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2598	110000606746	324110	8071911	
2599	110000454348	325110	8401411	
2600	110007388692	486110	933711	
2601	110058354427	486110	16486611	
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2603	110058369812	486110	16486011	
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2607	110058351698	486110	16489111	
2608		486110		
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2610	110058369787	486110	16485811	
2611	110000550332	325311	8185111	
2612	110058352633	486110	16492511	
2613	110007387960	486110	8350911	
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2615	110058369830	486110	16494311	
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2617	110007388674	486110	8521711	
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2621	110058369796	486110	16497111	
2622	110058356229	486110	16488011	
2623	110058348122	486110	16488211	
2624		486110		
2625	110055582463	486110	17098411	
2626	110058369821	486110	16486111	
2627	110058352615	486110	16493111	
2628	110058351661	486110	16488911	
2629	110000453651	325510		
2630	110033646856	486110	16485911	
2631	110015682037	325311	7433611	
2632	110001646158	486110	8464511	
2633	110056288039	486110	16992211	

SUN CHEMICAL SPECIALTY INKS
Dow Chemical/ Rohm and Haas (formerly Morton-West Alexandria, OH)
Amylin Ohio LLC (1409040987)
XIM Products, Incorporated
Lubrizol Corporation
Kalcor Coatings Company
RPM (formerly Moran, Carboline, Sun Chemical)
CIL ISOTOPE SEPARATIONS, INC. (0829100409)
ADDINGTON CRUDE OIL STA
ALLEN CRUDE OIL PIPELINE STA
LEMCO ENTERPRISES INC
VALERO ARDMORE RFNRY
BAKER PETROLITE CORP - BARNSDALL / BARNSDALL MFG FACLTY
MORRIS CRUDE OIL PIPELINE STA
BINGER CRUDE OIL FACLTY
BINGER CRUDE OIL STA
BRISTOW CRUDE OIL PIPELINE STA
THAT CREEK CRUDE OIL STA
STATELINE STA
BURNS FLAT CRUDE OIL STA
COLONY STA
BYRON STA
CALUMET CRUDE OIL STA
CEMENT CRUDE OIL STA
VERDIGRIS PLT
CROMWELL TANK FARM
CROMWELL CRUDE OIL PIPELINE STA
ALLIED TANK 702
LITTLE FARM CRUDE OIL PIPELINE STA
CUSHING NORTH TANK FARM
CUSHING NORTH AND CENTRAL TANK FARM
CUSHING TERML
CUSHING CRUDE FAC
SHINN PENCE TANK FARM
CUSHING WEST TERMINAL
CYRIL STA
DEVOL STA
LINDSAY CRUDE OIL PUMP STA
HWY 177 STA
DOVER CRUDE OIL PIPELINE STA
DRUMRIGHT STA
DUNCAN STA
Gemini Coatings, Inc.
ELK CITY CRUDE OIL STA
ENID NITROGEN PLT
ENID CRUDE OIL PIPELINE STA
HWY 18 TRUCK STA

471 EAST BERGEY STREET
10 South Electric St.
8814 Trade Port Drive
1169 Bassett Rd
29400 LAKELAND BLVD.
37721 STEVENS BLVD
125 Fairground Rd.
1689 BURNETT DRIVE
1.5 MI E OF US81 MONUMENT
1.5 MILES SW OF
3204 HALE RD
ONE VALERO WAY
820 S BIRCH LAKE RD
4 MILES E OF I35/HWY 15 JCT
0.6 MI S OF HWY8 & N2640 RD
1.5 MILES S ON HWY 281
2 MI E ON HWY 16
4 MILES E OF PONCA CITY
0.47 MI S OF N2580 & E0040 RD
1 MILE NW OF
1/3 MILE N OF E1130
0.37 MI SE OF E0080/N2660 RDS
7 MILES W ON HWY 270 OF
1.2 MI E ON SH19, 1 MI S
6606 EAST 540 RD
0.4 MI S N3690/E1120 RDS
0.5 E OF HWY56 & E1170 RD
0.4 MI N TEXACO RD/N3510 RD
1 MILE E OFF HWY 33
2.12 MILES NE OF
2110 N LINWOOD AVE
2919 S LINWOOD AVE
3 MI S 0.5 MI E OF CUSHING
3 MI SE OF CUSHING
908 ESCO RD
HWY 277 1 5 MI E
NW OF
N HWY 76 TO E FARM RD LINDSAY
0.5 MI N OF HWY 177/PONDEROSA
2 MILES N AND 1.25 MILES W OF
1 MI E AND 2 MI S
4 MILES S OF
2300 Holloway Dr.
3.25 MILES S OF SH6 AND I40
1619 South 78th
2017 E WILLOW RD
0.21 MI W OF HW18/CO RD 5818

WADSWORTH		OH	44281-
West Alexandria	Preble County	OH	45381-
West Chester Twp.	Butler County	OH	45071-
Westlake		OH	44145-
Wickliffe	Lake County	OH	44092-
Willoughby		OH	44094-
Xenia	Greene County	OH	45385-
Xenia	Greene County	OH	45385-
ADDINGTON	Jefferson County	OK	73520-
ALLEN	Pontotoc County	OK	74825-
ARDMORE	Carter County	OK	73401-
ARDMORE	Carter County	OK	73401-
BARNSDALL	Osage County	OK	74002-
BILLINGS	Noble County	OK	74630-
BINGER	Caddo County	OK	73009-
BINGER	Caddo County	OK	73009-
BRISTOW	Creek County	OK	74010-
BURBANK	Osage County	OK	74633-
BURLINGTON	Alfalfa County	OK	73722-
BURNS FLAT	Washita County	OK	73624-
BURNS FLAT	Washita County	OK	73624-
BYRON		OK	73722-
CALUMET	Canadian County	OK	73014-
CEMENT	Caddo County	OK	73107-
CLAREMORE	Rogers County	OK	74019-2534
CROMWELL	Seminole County	OK	74837-
CROMWELL	Seminole County	OK	74837-
CUSHING	Payne County	OK	74023-
CUSHING	Payne County	OK	74023-
CUSHING	Payne County	OK	74023-
CUSHING	Payne County	OK	74023-
CUSHING	Payne County	OK	74023-5656
CUSHING	Payne County	OK	74023-
CUSHING	Payne County	OK	74023-
CUSHING	Payne County	OK	74023-
CYRIL	Caddo County	OK	73029-
DEVOL	Cotton County	OK	73531-
DIBBLE		OK	73031-
DICKSON	Carter County	OK	73401-
DOVER	Kingfisher County	OK	73734-
DRUMRIGHT	Creek County	OK	74030-
DUNCAN	Stephens County	OK	73533-
El Reno		OK	73036-
ELK CITY	Beckham County	OK	73644-
ENID	Garfield County	OK	73701-
ENID	Garfield County	OK	73701-
FAIRFAX	Osage County	OK	74637-

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39.744311	-84.526162
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2635	110058348104	486110	16488111	
2636	110058348159	486110	16488411	
2637	110058364309	486110	16496211	
2638	110058348131	486110	16493411	
2639		486110		
2640	110040757384	486110	16492711	
2641	110013884074	486110		
2642	110058351625	486110	16488611	
2643	110007386765	486110	16487511	
2644	110055588038	486110	17098311	
2645	110055602441	486110	17107111	
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2648	110007388647	486110	17118911	
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2650	110041996882	486990		
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2652	110058366655	486110	16487211	
2653	110004755514	486910		NEIOK2773
2654	110007167092	486110	17117611	
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2661	110000455766	325180	7420411	
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2665	110000606808	325998	884711	
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2669	110010491574	486110	883911	
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2671	110010494492	486110	8351111	
2672	110061087880	486110	16993111	
2673	110064626123	324110		
2674	110054887645	486110	17118511	
2675	110014346984	486110	8519711	
2676	110000454320	325311	8055411	
2677	110007386818	32518	735611	
2678	110000453973	325992	8536811	
2679	110000487964	325211	7394511	
2680	110031098005	325199		

FOX LACT HEALDTON TRUCK UNLOADING FACLTY
GARBER CRUDE OIL STORAGE TANK STA
GRAHAM STA
HEALDTON TANK STA TCO
WIRT STA
EAST CUSHING STA
CUSHING SOUTH STA
CENTURION PIPELINE /LEWIS TANK FARM
ERIN SPRINGS TRUCK STA
WASSON STA TANK FARM
MADILL STA
MANCHESTER STA
SEE STA TANK FARM
MAYSVILLE STA
MAYSVILLE TANK STA
U.S. ARMY MCALESTER ARMY AMMUNITION PLANT
ONEOK NGL PIPELINE /MEDFORD NGL STA
MULHALL STA
MORGAN RD CRUDE OIL STA
MAGELLAN PIPELINE CO LLC
ORLANDO STA
ORLANDO CRUDE OIL PIPELINE STA
WYNNEWOOD STA
PERRY STA
BAD CREEK CRUDE OIL PIPELINE STA
VERDEN CRUDE OIL STA
PHILLIPS 66 CO - PONCA CITY RFNRY / PONCA CITY RFNRY
PONCA CITY PLT
NITROGEN SULFUR FERTILIZER FACLTY
MAGELLAN PIPELINE CO LLC
MEDFORD STA
PRYOR ACTIVATED CARBON PLT
PRYOR CHEMICAL
TUSSY STA
REYDON STA
RINGWOOD CRUDE OIL PIPELINE STA
Baker Performance Chemicals
SEMINOLE CRUDE OIL PIPELINE STA
STILLWATER TRUCK STA
TULSA RFNRY EAST
VELMA STA
VELMA CRUDE OIL PIPELINE BREAKOUT STA
WOODWARD COMPLEX
WOODWARD IODINE FACLTY
XEROX CORP / OKC SITE
Georgia-Pacific Resins Inc
ABSORBENT TECHNOLOGIES, INC.

SH 53 E OF SH 76
5 MI S & 4 MI E OF TOWN
SEC 30 T2S R2W
1 MI N ON HWY 76
SEC 10, T4N, R3W
3 MILES S OF CUSHING
351253 E 750 RD CUSHING
4 MI SE OF CUSHING
6 MI S HWY 76/19
13798 PRAIRIE VALLEY RD
1.2 M N OF E1980/ PETTIJOHN RD
0.1 MI S OF HWY132 & E0040 RD
0.5 MI S OF N3200 & E0310 RD
0.5 MI SE OF HWY19/N3110 RD
2.5 MILES W ON HWY 19 OF
1 C TREE ROAD SJMMC-EM
2001 SOUTH HIGHWAY 81
0.2 MI W OF US-77N/CR 65
0.5 MI WEST SW 104 AND MORGAN
251 N SUNNYLANE RD
0.5 MI S OF ON HWY 77
2 MI S OF TOWN
1 MI E OF I-35 and HWY 29 JCN
0.6 MI S OF US-77 / N3200 RD
E1080 RD AND N3857 RD
5 MI W NW OF POCASSET
1000 S PINE
1006 E OAKLAND AVE
200 JUPITER PKWY
2290 S UNION
0.4 MI E OF N2940 & E0220 RD
1432 6TH ST MAIP
4463 HUNT ST
3 MILES NW OF
0.2 MI S OF OK-47/N1690 RD
5 MILES S OF HWY 60/58 JCT
9100 WEST 21ST STREET
1.5 MILES E OF HWY 9 AND 99
S OF E 32ND ST / S ROSE RD
902 W 25TH ST
0.1 MILES N 1ST ST/N2990 RD
1 MILE NE OF HWY 7
1000 TERRA DR
8 MILES N, 3 MILES E ON HWY 34
100 N MUSTANG ROAD, BLDG 200
2190 Old Salem Rd Ne
2830 FERRY ST SW

FOX	Carter County	OK	73435-
GARBER	Garfield County	OK	73738-
GRAHAM	Carter County	OK	73437-
HEALDTON	Carter County	OK	73438-
HEALDTON	Carter County	OK	74348-
KENDRICK	Lincoln County	OK	74079-
KENDRICK	Lincoln County	OK	74079-
KENDRICK	Lincoln County	OK	
LINDSAY	Garvin County	OK	73052-
LONE GROVE	Carter County	OK	73443-
MADILL	Marshall County	OK	74748-
MANCHESTER	Grant County	OK	73758-
MARLAND	Noble County	OK	74644-
MAYSVILLE	Garvin County	OK	73057-
MAYSVILLE	Garvin County	OK	73057-
MCALESTER	Pittsburg County	OK	74501-
MEDFORD		OK	
MULHALL	Logan County	OK	73063-
MUSTANG	Canadian County	OK	73064-
OKLAHOMA CITY	OKLAHOMA	OK	73117-
ORLANDO	Logan County	OK	73073-
ORLANDO	Logan County	OK	73073-
PAULS VALLEY	Garvin County	OK	73075-
PERRY	Noble County	OK	73007-
PHAROAH	Okfuskee County	OK	74880-
POCASSET	Grady County	OK	73079-
PONCA CITY	Kay County	OK	74601-
PONCA CITY	Kay County	OK	74601-
PONCA CITY	Kay County	OK	74601-
PONCA CITY	Kay County	OK	74601-
POND CREEK	Grant County	OK	73766-
PRYOR	Mayes County	OK	74361-
PRYOR	Mayes County	OK	74362-
RATLIFF CITY	Carter County	OK	73481-
REYDON	Roger Mills County	OK	73660-
RINGWOOD	Major County	OK	73768-
Sand Springs	Tulsa County	OK	74063-
SEMINOLE	Seminole County	OK	74868-
STILLWATER	Payne County	OK	74074-
TULSA	TULSA	OK	74101-
VELMA	Stephens County	OK	73491-
VELMA	Stephens County	OK	73091-
WOODWARD	Woodward County	OK	73801-
WOODWARD	Woodward County	OK	73801-
YUKON	Canadian County	OK	73099-5104
Albany	Linn County	OR	97321-
ALBANY	LINN	OR	

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34.351480	-97.440500
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34.818600	-97.449560
34.818310	-97.450220
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2693	110000488491	325211	972011	
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2695	110000333666	32551		
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PACIFIC ETHANOL COLUMBIA LLC
DYNO NOBEL- ST HELENS PLANT
Forrest Paint Co.
SFPP, L.P.
GEORGIA-PACIFIC CHEMCALS LLC
JASPER WOOD PRODUCTS
Miles Fiberglass & Plastics, Inc.
FLINT INK N A CORP
Miles Fiberglass & Composites
ARMSTRONG WORLD INDUSTRIES INC.
AKZO NOBEL COATINGS, INC.
KINGSFORD MANUFACTURING COMPANY
Hexion Speciality Chemicals, Inc
Arclin USA Inc
Berkley Products Company
AMER IRON OXIDE CO/ALLENPORT PLT
POLYMER DYNAMICS INC
GEO SPECIALTY CHEM/TRIMET PROD GROUP
GEO Specialty Chemicals (formerly Mallinckrodt Chemical Inc.)
3M ASTON/CHESTER TWP
FEDCHEM LLC/BETHLEHEM
PIRAMAL CRITICAL CARE INC/HANOVER TWP
ROYSTON LAB DIV/COATING MFG
LAUREL PIPELINE CO LP/BOOTHWYN BREAKOUT STATION
AMER REF GROUP/BRADFORD
ARKEMA ALTUGLAS/BRISTOL TWP
ROHM & HAAS CO/BRISTOL
NORTHTEC LLC/BRISTOL
CARLISLE SYNTEC INCORPORATED - Plant 6
EVONIK CORP/CHESTER
PQ CORP/CHESTER
KOPPERS INC/CLAIRTON PLT
GLAXO SMITHKLINE/UPPER PROVIDENCE
JOHNSON MATTHEY INC/RIVERSIDE
MONTGOMERY CHEM LTD/CONSHOHOCKEN
HALEY PAINT/CONSHOHOCKEN (Finnaren & Haley, Inc.)
MORGAN ADV MAT & TECH/COUDERSPORT PLT
PITT PENN OIL COMPANY
GEISINGER MED CTR/DANVILLE
GEORGE E MASON FUNERAL HOME/DAVIDSVILLE
Heico Chemicals Inc
DYNO NOBEL INC/DONORA
AGC CHEM AMER INC/THORNDALE
JOHNSON MATTHEY COLOUR TECH/DOWNINGTOWN
Penn Color Inc. - Doylestown
JOHNSON DIVERSEY
HUNTSMAN/EASTON

71335 RAIL LOOP DR
63149 Columbia River Hwy.
1011 McKinley Street
1765 PRAIRIE ROAD
2665 HIGHWAY 99 NORTH
37385 JASPER/LOWELL RD
1516 MAIN ST
2985 N. MARINE DR.
8855 SE OTTY RD
1645 RAILROAD AVE
1660 CROSS ST. S.E., PO BOX 12336 (97309)
3315 MARCOLA ROAD
470 S. 2nd St.
475 N. 28th St.
405 S. 7th Street
2 WHEELING PGH STEEL DR
2200 S. 12TH ST.
2409 N CEDAR CREST BLVD
2409 North Cedar Crest Boulevard
50 MILTON DR
275 KEYSTONE DR
3950 SCHELDEN CIR
128 1ST ST
3398 GARRETT MINE RD
77 N KENDALL AVE
100 ROUTE 413
200 ROUTE 413
411 SINCLAIR RD
1295 RITNER HWY.
1200 W FRONT ST
1201 W FRONT ST
300 N STATE ST
1250 S COLLEGEVILLE RD
900 RIVER RD
901 CONSHOHOCKEN RD
901 WASHINGTON ST
1118 E 2ND ST
426 FREEPORT ROAD, PO BOX 296
100 N ACADEMY AVE
1687 TIRE HILL RD
Rte. 611 P.O. Box 730
1320 GALIFFA DR
255 S BAILEY RD
498 ACORN LN
400 Old Dublin Pike
880 CROWE RD.
1525 WOOD AVE

BOARDMAN	Morrow County	OR	97818-
DEER ISLAND	Columbia County	OR	97054-
Eugene	Lane County	OR	97402-
EUGENE	Lane County	OR	97402-
EUGENE	Lane County	OR	97402-
JASPER		OR	
OREGON CITY	Clackamas County	OR	97045-1063
PORTLAND		OR	97217-
PORTLAND	Clackamas County	OR	97086-
SAINT HELENS	Columbia County	OR	97051-
SALEM	MARION	OR	97302-
SPRINGFIELD	Lane County	OR	97478-
Springfield	Lane County	OR	97477-
Springfield	Lane County	OR	97477-0057
Akron		PA	17501-
ALLENPORT	Washington County	PA	15412-
ALLENTOWN	Lehigh County	PA	18103-
ALLENTOWN	Lehigh County	PA	18104-9733
Allentown	Lehigh County	PA	18104-
ASTON	Delaware County	PA	19014-2217
BETHLEHEM	Northampton County	PA	18020-9464
BETHLEHEM	Northampton County	PA	18017-8936
BLAWNOX		PA	
BOOTHWYN		PA	19061-
BRADFORD	McKean County	PA	16701-1726
BRISTOL	Bucks County	PA	19007-3605
BRISTOL	Bucks County	PA	19007-
BRISTOL	Bucks County	PA	19007-1525
CARLISLE	Cumberland County	PA	17013-
CHESTER	Delaware County	PA	19013-3438
CHESTER	Delaware County	PA	19013-3436
CLAIRTON	Allegheny County	PA	15025-2109
COLLEGEVILLE	Montgomery County	PA	19426-2990
CONSHOHOCKEN	Montgomery County	PA	19428-2647
CONSHOHOCKEN	Montgomery County	PA	19428-1053
CONSHOHOCKEN	Montgomery County	PA	19428-
COUDERSPORT		PA	16915-
CREIGHTON		PA	
DANVILLE	Montour County	PA	17822-
DAVIDSVILLE		PA	
Delaware Water Gap	Monroe County	PA	18327-
DONORA	Washington County	PA	15033-3310
DOWNINGTOWN	Chester County	PA	19335-2003
DOWNINGTOWN	Chester County	PA	19335-3075
Doylestown		PA	18901-
EAST STROUDSBURG	MONROE	PA	18301-
EASTON	Northampton County	PA	18042-3186

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2770	110000337047	326199	3901011	NEIPA2254
2771	110001203527	324110		
2772	110000336994	424710	3873411	

WASHINGTON PENN PLAS/PERFORMANCE PROD DIV
LAKE ERIE BIOFUELS LLC/ERIE
BASF CORPORATION/ERIE
BASF CORPORATION/ERIE
Lord Corporation
CARPENTER CO/UPPER MACUNGIE
JOHNSON & JOHNSON CONSUMER INC/WHITEMARSH TWP
ADHESIVES RESEARCH INC/GLEN ROCK
PENN COLOR/HATFIELD
Jamestown Paint Company
HANDSOME LAKE ENERGY LLC/KENNERDELL
Pierce & Stevens Corp., Kimberton Facility
GLAXO SMITHKLINE/UPPER MERION
ARMSTRONG FLOORING INC/LANCASTER
Lebanon Chemical Corp
Modern Blending Technologies (formerly Childers Products Company, Inc.)
AVTEX FIBERS LEWISTOWN INC
JOHNSON & JOHNSON CONSUMER INC/LITITZ
BUCKEYE PIPE LINE CO/MACUNGIE STATION
JANSSEN BIOTECH INC/MALVERN
FENNER INC/FENNER DRIVES
RANBAR ELEC MATERIALS/MANOR PROD
SUNOCO LLC / MARCUS HOOK REFINERY
BRASKEM AMER INC/MARCUS HOOK
AVERY DENNISON PERFORMANCE POLYMERS/MILL HALL PLT
CRODA INC/DRAKETOWN ROAD
BASF CORP/MONACA PLT
NOVA CHEM CO/BEAVER
NOVA CHEM CO/BEAVER
Eastman Chemical Company (formerly FLEXSYS AMER LTD PAR/MONONGAHELA)
PPG IND/CHEM TECH CTR
CHEMCOAT/MONTOURSVILLE PAINT MFG PLT
HEXION INC/MOUNT JEWETT
Watson Standard
HENWIL CORP/NEWELL FAC
LYONDELL CHEM CO/NEWTOWN SQUARE
Rhone-Poulenc
SASOL CHEMICALS USA LLC/OIL CITY
SASOL CHEMICALS USA LLC/OIL CITY
MATHESON TRI GAS/UPPER HANOVER
HORSEHEAD CORP/PALMERTON
INDSPEC CHEM CORP/PETROLIA
ARKEMA INC. (formerly ATOFINA Chemicals, Incorporated)
ARDEX LAB INC/CLEANING & POLISHING PREP
ASHLAND SPECIALTY CHEMICAL COMPANY
SUN REFINING AND MARKETING
PHILA ENERGY SOL REF/ PES

ROUTE 136
1540 E LAKE RD
1729 EAST AVE
1729 EAST AVE
P O BOX 519
7050 CAMP HILL RD
400 SEAKS RUN RD
2755 BERGEY RD
108 MAIN STREET
173 CORNPLANTER LN
P.O. Box 218, Rt. 113
709 SWEDELAND RD
1067 DILLERVILLE RD
1600 E. Cumberland St.
2061 Hartel Street
1000 ELIZABETH ST
400 W LINCOLN AVE
100 BUCKEYE RD
200 GREAT VALLEY PKWY
311 W STIEGEL ST
ROUTE 993
100 GREEN ST
750 W 10TH ST
171 DRAKETOWN RD
8 CRODA WAY
370 FRANKFORT RD
400 FRANKFORT RD
400 FRANKFORT RD
829 ROUTE 481
440 COLLEGE PARK DR
CANFIELD LN
HUTCHINS RD (253 Borden Drive)
2895 Grand Ave
899 THIRD ST
3801 WEST CHESTER PIKE
292 STATE ROUTE 8
292 STATE ROUTE 8
292 STATE ROUTE 8
1401 STAUFFER RD
900 DELAWARE AVE
133 MAIN ST
2000 MARKET STREET
2050 BYBERRY RD
2801 CHRISTOPHER COLUMBUS BLVD
3001 PENROSE AVE.
3144 W PASSYUNK AVE

EIGHTY FOUR		PA	
ERIE	Erie County	PA	16511-1032
ERIE	Erie County	PA	16503-2367
ERIE	Erie County	PA	16503-2367
Erie	Erie County	PA	
FOGELSVILLE	Lehigh County	PA	18051-0519
FORT WASHINGTON	Montgomery County	PA	19034-2210
GLEN ROCK	York County	PA	17327-
HATFIELD	Montgomery County	PA	19440-
Jamestown	Mercer County	PA	16134-8509
KENNERDELL	Venango County	PA	16374-4935
Kimberton		PA	19442-
KING OF PRUSSIA	Montgomery County	PA	19406-2711
LANCASTER	Lancaster County	PA	17603-2613
Lebanon	Lebanon County	PA	17042-
Levittown	BUCKS	PA	19057-4592
LEWISTOWN		PA	17044-
LITITZ	Lancaster County	PA	17543-8701
MACUNGIE	Lehigh County	PA	18062-
MALVERN	Chester County	PA	19355-1307
MANHEIM	Lancaster County	PA	17545-1747
MANOR	Westmoreland County	PA	15665-0607
MARCUS HOOK	Delaware County	PA	19061-
MARCUS HOOK	Delaware County	PA	19061-4500
MILL HALL	Clinton County	PA	17751-8608
MILL HALL	Clinton County	PA	17751-8727
MONACA	Beaver County	PA	15061-2210
MONACA	Beaver County	PA	15061-2212
MONACA	Beaver County	PA	15061-2212
MONONGAHELA	Washington County	PA	15063-3437
MONROEVILLE	Allegheny County	PA	15146-1536
MONTOURSVILLE	Lycoming County	PA	17754-
MOUNT JEWETT		PA	16740-
NEVILLE ISLAND		PA	15225-
NEWELL		PA	
NEWTOWN SQUARE		PA	19073-
Oil City	Venango County	PA	16301-
OIL CITY	Venango County	PA	16301-5626
OIL CITY	Venango County	PA	16301-5626
PALM	Montgomery County	PA	18070-1000
PALMERTON	Carbon County	PA	18071-2008
PETROLIA	Butler County	PA	16050-9717
Philadelphia	Philadelphia County	PA	19103-
PHILADELPHIA	Philadelphia County	PA	19116-
PHILADELPHIA	Philadelphia County	PA	19148-
PHILADELPHIA	Philadelphia County	PA	
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KINDER MORGAN LIQUIDS TERM/PHILA
SUN CHEMICAL GPI
PUROLITE INC/MFG CHEM
ADVANSIX (FORMERLY HONEYWELL/FRANKFORD PLT)
PLAINS PROD TERM LLC/67TH ST
Lawrence-McFaddon Company
INOLEX CHEM CO/PHILA
SUNOCO, INC. (R&M) FRANKFORD PLANT
Tioga II Marine Terminal Wharf
Rohm and Haas
SOVEREIGN PKG GROUP INC/EAST PIKELAND
ASHLAND INC TERM FKA SUNOCO/PLASTICIZER
CALGON CARBON CORP/NEVILLE ISLAND PLT
VALSPAR CORP/PGH
ASHLAND INC NEVILLE ISLAND PLT
NEVILLE CHEM CO/PGH
PRESSURE CHEM CO/PGH
Aristech
PPG Industries, Incorporated
SPRAY PROD CORP/PLYMOUTH MEETING
PA GEN ENERGY CO LLC/FISK HOLLOW PAD A
HAMMOND LEAD PRODUCTS/POTTSTOWN
OCCIDENTAL CHEM CORP/POTTSTOWN
MCADOO & ALLEN/QUAKER COLOR DIV
BMR 145 KING OF PRUSSIA/RADNOR
BMR 145 KING OF PRUSSIA/RADNOR
MISCO PRODS CORP
The Glidden Company Reading Plant (formerly Akzo Nobel)
SUN PIPE LINE/MONTELLO PUMP STATION
CHEROKEE PHARM LLC/RIVERSIDE BORO PLT
NEW ENTERPRISE STONE/ROARING SPRING
EPS VALSPAR COATINGS/ROCHESTER PLT
LORD CORP/SAEGERTOWN
G&W PA LAB/SELLERSVILLE
BIMAX INC/ SPRINGFIELD
PALMER INTL INC/SKIPPACK
INTL WAXES INC/FARMERS VALLEY
PPG IND INC/SPRINGDALE
OMG AMER/SUGARCREEK TWP
SANOFI PASTEUR/SWIFTWATER FAC
Air Prods & Chemicals Inc Specialty Gas Div
SABIC INNOVATIVE PLASTICS/THORNDALE
DUPONT & CO INC/TOWANDA
DUPONT TOWANDA PLANT
GLOBAL TUNGSTEN & POWDERS CORP/HAWES STREET PLT
GE BETZ INC/TREVOSE
ALBEMARLE/TYRONE QUALITY CHEM

3300 N DELAWARE AVE
3301 HUNTING PARK AVE.
3620 G ST
4700 BERMUDA ST
6850 ESSINGTON AVE
7430 STATE RD
JACKSON AND SWANSON ST
MARGARET & BERMUDA ST
North Delaware Avenue & Tioga
765 PIKE SPRINGS RD
200 NEVILLE RD
200 NEVILLE RD
2000 WESTHALL ST
2650 NEVILLE RD
2800 NEVILLE RD
3419 SMALLMAN ST
1323 CONSHOHOCKEN RD
SARTWELL CREEK RD
10 S GROSSTOWN RD
375 ARMAND HAMMER BLVD
201 S HELLERTOWN AVE
145 KING OF PRUSSIA RD
145 KING OF PRUSSIA RD
1048 STINSON DR.
301 Bern Street
515 FRITZTOWN RD
100 AVE C
ROUTE 36 N
372 CLEVELAND ST
601 SOUTH ST
650 CATHILL RD
INDUSTRIAL LN
2036 LUCON RD
45 ROUTE 446
125 COLFAX ST
TWO MILE RUN RD
DISCOVERY DR
357 Marian Ave.
251 S BAILEY RD
192 PATTERSON BLVD
192 PATTERSON BLVD
HAWES ST
4636 SOMERTON RD
2 ADAMS AVE

PHILADELPHIA	Philadelphia County	PA	19134-
PHILADELPHIA	Philadelphia County	PA	19132-
PHILADELPHIA	Philadelphia County	PA	19134-
PHILADELPHIA	Philadelphia County	PA	19137-
PHILADELPHIA	Philadelphia County	PA	19153-
Philadelphia	Philadelphia County	PA	19136-
PHILADELPHIA	Philadelphia County	PA	19148-
PHILADELPHIA	Philadelphia County	PA	19137-
Philadelphia	Philadelphia County	PA	
Philadelphia	Philadelphia County	PA	
PHOENIXVILLE		PA	19460-4743
PITTSBURGH	Allegheny County	PA	15225-
PITTSBURGH	Allegheny County	PA	15225-1620
PITTSBURGH	Allegheny County	PA	15233-
PITTSBURGH	Allegheny County	PA	15225-1404
PITTSBURGH	Allegheny County	PA	15225-1408
PITTSBURGH	Allegheny County	PA	15201-1915
Pittsburgh	Allegheny County	PA	
Pittsburgh	Allegheny County	PA	
PLYMOUTH MEETING	Montgomery County	PA	19462-2777
PORT ALLEGANY		PA	
POTTSTOWN	Montgomery County	PA	19464-3764
POTTSTOWN	Montgomery County	PA	
QUAKERTOWN	Bucks County	PA	18951-
RADNOR	Delaware County	PA	19087-4557
RADNOR	Delaware County	PA	19087-4557
READING	BERKS	PA	19605-
Reading	BERKS	PA	19601-
Reading	Berks County	PA	19608-
RIVERSIDE	Northumberland County	PA	17868-
ROARING SPRING		PA	
ROCHESTER	Beaver County	PA	15074-1624
SAEGERTOWN	Crawford County	PA	16433-
SELLERSVILLE	Bucks County	PA	18960-1512
SHREWSBURY	York County	PA	17327-
SKIPPACK	Montgomery County	PA	19474-
SMETHPORT	McKean County	PA	16749-5413
SPRINGDALE	Allegheny County	PA	15144-1506
SUGARCREEK BORO	Venango County	PA	16323-
SWIFTWATER	Monroe County	PA	18370-0187
Tamaqua	Schuylkill County	PA	18252-0351
THORNDALE	Chester County	PA	19372-
TOWANDA	Bradford County	PA	18848-8208
TOWANDA	Bradford County	PA	18848-
TOWANDA	Bradford County	PA	18848-
TREVOSE	Bucks County	PA	19053-6742
TYRONE	Blair County	PA	16686-

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2822	110043815690	324110	4966711	
2823	110059011965	325991		
2824	110064206238	325991		
2825	110000337476	325211	8004211	NEI7343
2826	110041053285	325194	6559111	
2827	110000583057	325211	6596911	
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2842	110000580577	325412	7128611	
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2845	110041558524	325412	7128911	
2846	110000747531	325412	15513911	
2847	110000744696	325412	8041311	
2848	110000580648	325412	7129911	
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2850	110000580657	325412	8951411	
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2855	110056869072	325412	7130211	
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2859	110000580443	325412		
2860	110000307793	325520		
2861	110007342786	325412	7438911	
2862	110002087232	325510	3076111	
2863	110004936393	325211	6662711	
2864	110040900237	325411	6562211	

ALBEMARLE/TYRONE QUALITY CHEM
CRC IND INC/WARMINSTER
INTERLECTRIC CO/WARREN
UNITED REFINING CO/WARREN PLT
WASHINGTON PENN PLAS/V-BAT
WASHINGTON PENN PLAS/ARDEN
ARKEMA INC/WEST CHESTER
Coopers Creek Chemical Corporation
EASTMAN CHEM RESINS INC/JEFFERSON SITE
MERCK SHARP & DOHME / WEST POINT
MERCK SHARP & DOHME / WEST POINT
LONZA INC/WILLIAMSPORT PLT
Merck-Sharp Dohme Arecibo
BRISTOL MYERS SQUIBB MANUFACTURING CO.
PFIZER BARCELONETA (OPER/SM80)
Pfizer Pharmaceuticals LLC (Barceloneta)
Merck-Sharp Dohme
Abbvie Ltd
Neolpharma, Inc.
IPR Pharmaceuticals, INC
Lilly del Caribe, INC. Carolina
Water Treatment Specialist Inc
PROCTER AND GAMBLE
AYERST-WYETH PHARMACEUTICALS, INC.
Baxter Health Care of Puerto Rico , Guayama
TAPI Industries, Inc. (Formerly, Chemsource)
CHEVRON PHILLIPS PR CORE INC
Lilly del Caribe (Formerly, IPR)
Janssen Ortho LLC
Bristol-Myers Squibb Manufacturing Company Humacao
Baxter Healthcare of Puerto Rico
Amgen Manufacturing Limited
McNeil Consumer Products
MSD INTERNATIONAL GMBH (PR BRANCH), LLC LAS PIEDRAS OPERATIONS, PUERTO RICO
BASF Agricultural Products of PR
Ortho Pharmaceutical
Warner Chilcott PR, LLC
Bristol-Myers Squibb Holdings Pharma, Ltd.
Dupont Agricultural Caribe Industries, LTD
COMMONWEALTH OIL REFINING (CORCO)
BILCHEM LTD
PFIZER PHARMACEUTICAL LLC - ARECIBO
HENKEL PUERTO RICO INC (formerly Loctite)
Pfizer Pharmaceuticals LLC (VB)
GENERAL POLYMER, INC.
NORTHERN INDUSTRIES INC.
RHODES TECHNOLOGIES

2858 BACK VAIL RD
885 LOUIS DR
1401 LEXINGTON AVE
15 BRADLEY ST
1500 WEIRICH AVE
450 RACETRACK RD
610 S BOLMAR ST
844 RIVER RD
2200 STATE HIGHWAY 837
770 SUMNEYTOWN PIKE
770 SUMNEYTOWN PIKE
3500 TRENTON AVE
Arecibo, PR
CARR 2 KM 56.4
RD 2, KM 58.2,
Road 140, Km 64.4
ROAD 2 KM 56.7
Road 2, Km 59, Barceloneta
PR-189, Jardines, Street 99
PR-188, San Isidro Industrial Park
PR-3, Km 12.6
P.R. Rd. 896 Km 2.0 Bo. Plamas Industrial Park
PR 735 Km. 2.3, Rio Llano Ward
CARR 3 KM 142.1
Road 3, Km 142.5
Road 3, Km 143, Puente Jobos Ward
ROAD 710 KM 1.3 BO. LAS MAREAS
Road PR-53, Km 84, Jobos Ward
PR-933, Km 0.1,Mamey Ward
PR-3, Km 77.5
PR-144, Km 20.6, Jayuya
PR-31, Km 24.6
PR-183, Km 19.8, Montones Ward
PR-183, PQUE. INDUST. PRIDCO
PR-2, KM 47.3
Road 2, Km 45.6, Campo Alegre
Road 2, Km 45.7
Road 686, Km 2.3
Road 686, Km 2.3
ROAD 127, KM 17.3
P.O. BOX 7468
PR #2, KM 60.0 BO. SABANA HOYO
9 Ave Vicente Quilinchini
PR 689, Km 1.9, Carmelita Ward
59 FOUNDRY ST
10 POTTER CT
498 WASHINGTON ST

TYRONE	Blair County	PA	16686-8100
WARMINSTER	Bucks County	PA	18974-2820
WARREN	Warren County	PA	16365-2849
WARREN	Warren County	PA	16365-3224
WASHINGTON	WASHINGTON	PA	
WASHINGTON	WASHINGTON	PA	
WEST CHESTER	Chester County	PA	19382-3797
West Conshohocken	Montgomery County	PA	19428-
WEST ELIZABETH	Allegheny County	PA	15088-
WEST POINT	Montgomery County	PA	19486-8000
WEST POINT	Montgomery County	PA	19486-8000
WILLIAMSPORT	Lycoming County	PA	17701-7924
Arecibo	Arecibo Municipio	PR	00612-
BARCELONETA	Barceloneta Municipio	PR	
BARCELONETA	Barceloneta Municipio	PR	
Barceloneta	Barceloneta Municipio	PR	00617-
Barceloneta	Barceloneta Municipio	PR	00617-
Barceloneta	Barceloneta Municipio	PR	00617-
Caguas	Caguas Municipio	PR	00936-
Canovanas	Canovanas Municipio	PR	00729-
Carolina	Carolina Municipio	PR	00986-
Catano	Catano Municipio	PR	00962-
Cayey	Cayey Municipio	PR	00737-
GUAYAMA	Guayama Municipio	PR	00785-
Guayama	Guayama Municipio	PR	00758-
Guayama	Guayama Municipio	PR	00785-
GUAYAMA	Guayama Municipio	PR	
Guayama	Guayama Municipio	PR	00785-
Gurabo	Gurabo Municipio	PR	00778-
Humacao	Humacao Municipio	PR	00792-
Jayuya	Jayuya Municipio	PR	00664-
Juncos	Juncos Municipio	PR	00777-
Las Piedras	Las Piedras Municipio	PR	00771-
LAS PIEDRAS	Las Piedras Municipio	PR	00771-
Manati	Manati Municipio	PR	00674-
Manati	Manati Municipio	PR	00674-
Manati	Manati Municipio	PR	00674-
Manati	Manati Municipio	PR	00674-
Manati	Manati Municipio	PR	00674-
PENUELAS	PENUELAS	PR	
PONCE		PR	
PUERTO RICO		PR	
Sabana Grande		PR	00637-
Vega Baja	Vega Baja Municipio	PR	00694-
CENTRAL FALLS	Providence County	RI	02863-
COVENTRY	Kent County	RI	02816-
COVENTRY	Kent County	RI	02816-

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2898	110017326963	325199	3965211	
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CLARIANT CORPORATION COVENTRY PLANT
CAL CHEMICAL CORPORATION
TECHNIC INC.
MEARTHANE PRODUCTS CORPORATION
TECHNIC, INC.
EXXON MOBIL CORPORATION
DSM COATING RESINS, INC.
Arkwright
DENISON PHARMACEUTICALS INC.
NEWPORT BIODIESEL, INC.
COOL POLYMERS
POLYWORKS LLC
CARROLL COATINGS
SPECTRUM COATINGS LABORATORIES, INC.
EASTERN COLOR AND CHEMICAL CO.
ALEXION PHARMACEUTICALS, INC.
MERECO DIVISION
ORIGINAL BRADFORD SOAP WORKS, INC.
Beta Engineering
EASTERN RESINS CORP.
C.N.C. INTERNATIONAL, LP
SHAW INDUSTRIES GROUP INC PLAN T 8N.
DOMTAR PAPER COMPANY LLC
AMERICARB INC BENNETTSVILLE PCC PLANT
MILLIKEN & CO CHEMICAL ALLEN PLANT
COLOR CONVERTING INDS
CHEMTRADE PERFORMANCE CHEMICALS US LLC
RESOLUTE FP US INC
SHAW INDUSTRIES GROUP INC PLANT 8T
SHAW INDUSTRIES GROUP INC PLANT 8T
BASF CORPORATE/CLEMSON SITE
A & M CLEANING PRODS INC
KINDER MORGAN OPERATING LP C
KINDER MORGAN SHIPYARD RIVER TERMINAL SO
SOLVAY USA INC
SALISBURY ELECTRICAL SAFETY LLC
Bayer
NORTH SAFETY PRODUCTS CLOVER FACILITY
Ultra Additives Llc
SHAW INDUSTRIES GROUP INC PLANT 8S
WESTINGHOUSE ELECTRIC:COLUMBIA
WELLMAN INC
SPECIALTY MINERALS
WEYLCHEM US INC
HENKEL CORPORATION
CELANESE LTD ENOREE PLANT
DuPont

500 WASHINGTON STREET
592 ARNOLD RD
1 SPECTACLE ST
16 WESTERN INDUSTRIAL DR
860 WELLINGTON AVE
1001 WAMPANOAG TRAIL
199 AMARAL ST
538 Main Street
1 POWDER HILL RD
312 CONNELL HWY
51 CIRCUIT DR
1 TUPPERWARE DR
150 ERNEST ST
217 CHAPMAN ST
35 LIVINGSTON ST
100 TECHNOLOGY WAY
1505 MAIN ST
200 PROVIDENCE ST
1174 RIVER ST
20 PRIVILEGE ST
441 MASTERS BLVD
585 WILLAMETTE RD
HWY 912 585 WILLIAMETTE RD
HWY 5 AND I-85
150 BELCHER RD.
3507 LEEDS RD
5300 CURETON FERRY RD
1213 GREENVILLE HWY
1213 GREENVILLE HWY
1215 GREENVILLE HWY
4110 OLD GREENVILLE HWY.
1500 GREENLEAF RD
1500 GREENLEAF ST
2151 KING ST EXT
4091 AZALEA DR
4500 Bushy Park
1150 JACKSON HEIGHTS RD
975 Ultra Ave
4401 ST ANDREWS RD
5801 Bluff Rd.
1000 E MCIVER RD
4001 MCCORDS FERRY RD US HWY 6
2114 LARRY JEFFERS RD
14351 HWY 221
14355 HWY 221
6901 DUPONT RD

COVENTRY	Kent County	RI	
COVENTRY	Kent County	RI	02816-
CRANSTON	Providence County	RI	02910-
CRANSTON	Providence County	RI	02921-
CRANSTON	Providence County	RI	02910-
EAST PROVIDENCE	Providence County	RI	02915-
EAST PROVIDENCE	Providence County	RI	02914-
Fiskeville		RI	02823-
LINCOLN	Providence County	RI	02865-
NEWPORT	Newport County	RI	02840-
NORTH KINGSTOWN	Washington County	RI	02852-
NORTH SMITHFIELD	Providence County	RI	02896-
PROVIDENCE	Providence County	RI	02905-
PROVIDENCE	Providence County	RI	02905-
PROVIDENCE	Providence County	RI	02904-
SMITHFIELD	Providence County	RI	02917-
WEST WARWICK	Kent County	RI	02893-
WEST WARWICK	Kent County	RI	02893-
West Warwick	Kent County	RI	
WOONSOCKET	Providence County	RI	02895-
WOONSOCKET	Providence County	RI	02895-
ANDERSON	ANDERSON	SC	29626-
BENNETTSVILLE	Marlboro County	SC	29512-
BENNETTSVILLE	Marlboro County	SC	29512-
BLACKSBURG	Cherokee County	SC	29702-
BOILING SPRINGS		SC	29316-
CARLISLE	Chester County	SC	29031-
CATAWBA	York County	SC	29704-
CENTRAL	Pickens County	SC	29630-
CENTRAL	Pickens County	SC	29630-
CENTRAL	Pickens County	SC	29630-
CENTRAL	Anderson County	SC	29630-
CHARLESTON	Charleston County	SC	
CHARLESTON	Charleston County	SC	29405-
CHARLESTON	Charleston County	SC	29405-
CHARLESTON	Charleston County	SC	29405-
Charleston	Charleston County	SC	29423-
CLOVER	York County	SC	29710-
Clover	York County	SC	29710-
COLUMBIA	Richland County	SC	29210-
Columbia	Richland County	SC	29205-
DARLINGTON		SC	29532-
EASTOVER	Richland County	SC	29044-
ELGIN	Kershaw County	SC	29045-9262
ENOREE	Spartanburg County	SC	29335-
ENOREE	Spartanburg County	SC	29335-
Florence	FLORENCE	SC	29506-

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2915	110040866783	325211	15658311	
2916	110043305688	325211		
2917	110000587311	325211	4041311	
2918	110000353466	322121	5698611	
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Ford Chemical Company
S&ME
Nicca Usa Inc
TEKNOR APEX CAROLINA CO
EASTMAN CHEMICAL COMPANY SC OPERATIONS
DAK AMERICAS LLC COLUMBIA SITE
DAK AMERICAS LLC COLUMBIA SITE
INTERNATIONAL PAPER CO GEORGETOWN CONTAINER
3V INC
SUN CHEMICAL CORP
LANXESS CORP BUSHY PARK SITE
LANXESS CORPORATION
REYNOLDS CO
NUTRA MANUFACTURING GREENVILLE
NUTEX INC
3M COMPANY - GREENVILLE FILM
3M COMPANY TAPE PLANT
HOECHST-CELANESE CORP GREENVILLE PLANT
ASCEND PERFORMANCE MATERIALS OPS LLC
FUJIFILM MANUFACTURING USA INC
BMW MANUFACTURING CO LLC
MITSUBISHI POLYESTER FILM INC
SONOCO PRODUCTS COMPANY
MILLIKEN CHEMICAL DEWEY PLANT
NAN YA PLASTICS CORPORATION AMERICA
AKZO NOBEL COATINGS INC
CYTEC SURFACE SPECIALTIES
INVISTA SARL
Clariant:Martin
DU PONT COOPER RIVER PLANT
DAK AMERICAS LLC
DAK AMERICAS LLC COOPER RIVER PLANT
INGEVITY SOUTH CAROLINA LLC
ALLNEX USA INC
MAGELLAN TERMINAL HOLDINGS LP N AUGUSTA
MAGELLAN TERMINAL HOLDINGS LP N AUGUSTA
MEADWESTVACO SPECIALTY CHEMICALS
SI GROUP INC ORANGEBURG
SI GROUP INC ORANGEBURG (formerly Albemarle Corporation)
ASHLAND PERFORMANCE MATERIALS (formerly Air Products and Chemicals)
CYTEC CARBON FIBERS LLC
CELANESE ACETATE ROCK HILL-CLOSED
PBI PERFORMANCE PRODUCTS INC
INCHEM CORP
GEORGIA PACIFIC CORP
MICHELIN NORTH AMERICA INC SANDY SPRINGS US2
Engelhard Corporation

2300 BANKS ST
9751 Southern Pine Boulevard
1044 S. Nelson Dr.
1092 N OLD LAURENS RD
500 K AVE
570 K AVE
570 K AVE
1480 INTERNATIONAL DR
888 WOODSTOCK ST
1506 BUSHY PARK RD BLDG B9-2
1530 BUSHY PARK RD
1530 BUSHY PARK RD
10 GATES ST
1050 WOODRUFF RD
110 CATALINA DR.
1400 PERIMETER RD
1450 PERIMETER RD
I-85 & WOODRUFF RD
1515 HWY 246 S
211 PUCKETT FERRY RD
1400 HWY 101 S
2001 HOOD RD
1 N 2ND ST
1440 CAMPTON RD
140 E BEULAH RD
1872 HWY 9 BYPASS W
403 Carline Rd.
643 HWY 1 S
Hwy 102
3300 CYPRESS GARDENS RD
3350 CYPRESS GARDENS RD
3350 CYPRESS GARDENS RD
5598 VIRGINIA AVE
131 REVCO RD
217 SWEETWATER RD
222 SWEETWATER RD
5600 VIRGINIA AVENUE
725 CANNON BRIDGE RD
725 CANNON BRIDGE RD
410 OLD PELZER RD
7139 AUGUSTA RD
2850 CHERRY RD (HWY 21)
2972 CHERRY RD
800 CEL-RIVER RD
1028 GEORGIA PACIFIC DR
6301 HWY 76
554 ENGELHARD DRIVE

Fort Mill		SC	29715-
Fort Mill		SC	28273-
Fountain Inn	Laurens County	SC	29644-
FOUNTAIN INN	Laurens County	SC	29644-
GASTON	Calhoun County	SC	29053-
GASTON	Calhoun County	SC	29053-
GASTON	Calhoun County	SC	29053-
GEORGETOWN	Georgetown County	SC	29440-
GEORGETOWN	Georgetown County	SC	29440-4789
GOOSE CREEK	Berkeley County	SC	29445-
GOOSE CREEK	Berkeley County	SC	29445-
GOOSE CREEK	Berkeley County	SC	29445-
GREENVILLE	Greenville County	SC	29611-
GREENVILLE	Greenville County	SC	29607-
GREENVILLE	Greenville County	SC	29609-
GREENVILLE	Greenville County	SC	29605-
GREENVILLE	Greenville County	SC	29605-
GREENVILLE	Greenville County	SC	29606-
GREENWOOD	Greenwood County	SC	29646-
GREENWOOD	Greenwood County	SC	29649-
GREER	Spartanburg County	SC	29651-
GREER	Greenville County	SC	29650-
HARTSVILLE	Darlington County	SC	29550-
INMAN	Spartanburg County	SC	29349-
LAKE CITY	Williamsburg County	SC	29560-
LANCASTER	Lancaster County	SC	29720-
Langley	Aiken County	SC	29834-
LUGOFF	Kershaw County	SC	29078-
Martin	Allendale County	SC	29836-
MONCKS CORNER	Berkeley County	SC	29461-
MONCKS CORNER	Berkeley County	SC	29461-
MONCKS CORNER	Berkeley County	SC	29461-
N CHARLESTON	Charleston County	SC	29406-3615
NORTH AUGUSTA	Aiken County	SC	29842-
NORTH AUGUSTA	Edgefield County	SC	29860-9051
NORTH AUGUSTA	Edgefield County	SC	29860-7447
NORTH CHARLESTON	Charleston County	SC	29406-
ORANGEBURG	Orangeburg County	SC	29115-
ORANGEBURG	Orangeburg County	SC	29115-
Piedmont	Greenville County	SC	29673-
PIEDMONT	Greenville County	SC	29673-
ROCK HILL	YORK	SC	29730-
ROCK HILL	YORK	SC	29730-
ROCK HILL	YORK	SC	29730-
RUSSELLVILLE		SC	
SANDY SPRINGS	Anderson County	SC	29670-
Seneca	Oconee County	SC	29678-

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33.478370	-81.920050
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2995	110011891925	325613	3783511	
2996	110000371856	325199	5610911	NEITN5255
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2998	110000549354	325180	2889711	
2999	110000371865	325212	6517011	
3000	110005003263	325998	5611111	
3001	110000371927	325180	5721611	
3002	110015583448	325199	8335011	
3003	110000590012	325211	17021511	
3004	110067041784	325211	4761311	

ROYAL ADHESIVES AND SEALANTS LLC COATINGS AND SPECIALTY POLYMERS DIVISION
AMOCO FABRICS & FIBERS CO
AURIGA POLYMERS INC
AURIGA POLYMERS INC SPARTANBURG PLANT
AURIGA POLYMERS INC-SPARTANBURG FACILITY
MAGELLAN TERMINALS: SPARTANBURG II
FLINT GROUP NORTH AMERICA CORPORATION
MAGELLAN TERMINALS: SPARTANBURG I
SONOCO PRODUCTS COMPANY
BP AMOCO CHEMICALS
STARCHEM LLC
ABE South Dakota LLC
VALERO RENEWABLE FUELS COMPANY, LLC
Valero Renewable Fuels Company
POET Biorefining - Northern Lights Ethanol
POET Biorefining - Great Plains Ethanol
POET Biorefining - James Valley Ethanol
POET Biorefining - Sioux River Ethanol
ABE South Dakota LLC
NuGen Energy
Aberdeen Energy
POET Biorefining - Prairie Ethanol
Redfield Energy
Red River Energy
POET Research Center
Broin Associates
Glacial Lakes Energy
Dakota Ethanol
Lawrence-McFaddon Company
KING PHARMACEUTICALS, INC.
TEKNOR APEX TENNESSEE COMPANY
OLIN CORPORATION
ARCH CHEMICALS, INC.
Arch Chemicals, Incorporated
Chattem, Inc.
Pathway Polymers Inc.
BASF Corporation (Plant #2)
Dooley Chemical LLC
N. A. Industries, Inc.
SOFIX CORPORATION
DPC Enterprises, L.P.
BASF Corporation (Plant #1)
CHATTEM CHEMICALS, INC.
W. R. Grace & Co.
Lamberti Synthesis USA, Inc.
E. I. du Pont de Nemours and Company
Kordsa, Inc. / INVISTA S.a r.l.

863 SE MAIN ST
11 FRONT ST
1550 DEWBERRY RD
1550 DEWBERRY RD
1550 DEWBERRY RD
2430 S PINE ST EXT
302 JONES RD
650 DELMAR RD
242 SONOCO RD
1306 AMOCO DR
10150 GREENVILLE HWY
3601 Brown County 12W
COUNTY HIGHWAY 23
One Valero Place
48416 144th Street
27716 462nd Avenue
40425 133rd Street
29619 Spur Avenue
674 West Park Avenue
27283 447th Avenue
13435 370th Avenue
40509 247th Street
38650 171st Street
47333 104th Street
851 Washington Street
2209 EAST 57TH STREET NORTH
301 20th Avenue SE
46269 Highway 34
5843 JET WAY
501 FIFTH STREET
751 DUPREE ST.
1186 LOWER RIVER ROAD
1200 Old LOWER RIVER ROAD
1715 West 38th Street
2003 Curtain Pole Road
2120 Polymer Drive
2400 East 24th Street
2651 Riverport Road
2800 RIVERPORT ROAD
3 Riverside Lane
32 Lost Mound Drive
3801 ST. ELMO AVENUE
4000 North Hawthorne Street
4001 North Hawthorne Street
4501 North Access Road
4501 North Access Road

SIMPSONVILLE		SC	29681-
SPARTANBURG	Spartanburg County	SC	29301-
SPARTANBURG	Spartanburg County	SC	29307-
SPARTANBURG	Spartanburg County	SC	29307-
SPARTANBURG	Spartanburg County	SC	29307-
SPARTANBURG	Spartanburg County	SC	29302-
SPARTANBURG	Spartanburg County	SC	29302-
SPARTANBURG	Spartanburg County	SC	29302-
UNION		SC	
WANDO	Berkeley County	SC	29492-
WELLFORD	Spartanburg County	SC	29385-
Aberdeen	Brown County	SD	57401-
AURORA		SD	57006-
Aurora	Brookings County	SD	57002-
Big Stone City	Grant County	SD	57216-
Chancellor	Turner County	SD	57015-
Groton	Brown County	SD	57445-
Hudson	Lincoln County	SD	57034-
Huron	Beadle County	SD	57350-
Marion	Turner County	SD	57043-
Mina	Edmunds County	SD	57451-
Mitchell	Davison County	SD	57301-
Redfield	Spink County	SD	57469-
Rosholt	Roberts County	SD	57260-
Scotland	Bon Homme County	SD	57059-
Sioux Falls	MINNEHAHA	SD	57104-
Watertown	Codington County	SD	57201-
Wentworth	Lake County	SD	57075-
Arlington		TN	38002-
BRISTOL	Sullivan County	TN	37620-
BROWNSVILLE	Haywood County	TN	38012-
CHARLESTON	Bradley County	TN	37310-
CHARLESTON	Bradley County	TN	37310-
Charleston	Bradley County	TN	37310-
Chattanooga	Hamilton County	TN	37409-1259
Chattanooga	Hamilton County	TN	37406-
Chattanooga	Hamilton County	TN	37421-2263
Chattanooga	Hamilton County	TN	37407-
Chattanooga	Hamilton County	TN	37406-1723
CHATTANOOGA	Hamilton County	TN	37406-1744
Chattanooga	Hamilton County	TN	37406-
Chattanooga	Hamilton County	TN	37406-1029
CHATTANOOGA	Hamilton County	TN	37409-1234
Chattanooga	Hamilton County	TN	37406-1300
Chattanooga	Hamilton County	TN	37406-
Chattanooga	Hamilton County	TN	37415-3899
Chattanooga	Hamilton County	TN	37415-3899

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3013		325222		
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3023	110000373514	325211	8334511	
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Kordsa, Inc. / INVISTA S.a r.l.
VELSICOL CHEMICAL CORPORATION
Ergon Terminaling, Inc.
GEO Specialty Chemicals, Inc.
Akzo Nobel Surface Chemistry LLC
Indopco, Inc. d/b/a Alco Chemical
SUN CHEMICAL SPECIALTY INKS
Manufacturers Chemicals LLC
Benco Sales, Inc.
POLYLOOM CORP OF AMERICA
Fuji-Hunt Speciality
Cymer LLC
Sun Chemical - Dickson
J.M. HUBER CORPORATION
Egyptian Lacquer Manufacturing Company
Sun Chemical - Gallatin
PRIMESTER / TN EASTMAN CO KINGSPORT
Eastman Chemical Company, Tennessee Operations
BAE SYSTEMS ORDNANCE SYSTEMS INC. / HOLSTON ARMY AMMUNITION PLANT (HSAAP)
BAE SYSTEMS ORDNANCE SYSTEMS INC. / HOLSTON ARMY AMMUNITION PLANT (HSAAP)
Dow
COSMOLAB, INC.
TATE & LYLE INGREDIENTS AMERICAS LLC
JOLLEY ROCK INVESTMENTS, LLC
Besway Systems, Inc.
PMC Biogenix (formerly Crompton Corporation/ Enenco)
Buckman Labs Inc
W.M. Barr and Company
CHEMOURS MEMPHIS PLANT
Atofina Chemicals Inc
LUCITE INTERNATIONAL INC
PENN-A- KEM
VALERO REFINING COMPANY-TN LLC
FARRELL-CALHOUN INC
ESTERLINE DEFENSE GROUP/ARMTEC COUNTERME
Osmose Inc
Zeneca
Akzo Nobel Coatings Inc.
Advanced Composites, Inc.
MEGUIAR'S INC
Innophos Inc.
THE CHEMOURS COMPANY FC LLC
ERACHEM COMILOG, INC.
ROCKWOOD LITHIUM, INC.
SI GROUP INC.
URS / CH2M OAK RIDGE LLC
DUPONT OLD HICKORY PLANT

4501 North Access Road
4902 CENTRAL AVENUE
617 Terminal Road
751 Pineville Road
909 Mueller Avenue
909 MUELLER DR
3730 OLD TASSO ROAD, N.E.
4325 Old Tasso Rd.
123 Stout Dr.
1131 BROADWAY ST
411 MANUFACTURER'S ROAD
124 Cymer Lane
1667 Old Columbia Road
131 Highway 875
113 FORT GRANGER DRIVE
795 Steamplant Road
100 EASTMAN ROAD
301 S Wilcox Dr
4509 WEST STONE DRIVE
4509 WEST STONE DRIVE
730 Dale Avenue
1100 GARRETT PARKWAY
198 BLAIR BEND DRIVE
4999 ENKA HWY (HWY 160)
305 Williams Avenue
1231 Pope Street
1256 N. Mclean Blvd
2105 Channel Ave.
2571 FITE RD.
2571 Fite Road
2665 FITE RD
3324 CHELSEA
543 MALLORY AVE (WEST)
221 E CAROLINA AVE
25A LEDBETTER GATE ROAD
3450 Fite Rd
8218 Mt. Joy Road
20 Culvert Street
3050 Sidco Drive
3258 EZELL PIKE
4600 Centennial Blvd
1 DU PONT ROAD
795 FOOTE LANE
856 FOOTE LANE
380 CHEMWOOD DRIVE
OAK RIDGE TURNPIKE-RT 58
1002 INDUSTRIAL RD

Chattanooga	Hamilton County	TN	37415-3899
CHATTANOOGA	Hamilton County	TN	
Chattanooga	Hamilton County	TN	37405-
Chattanooga	Hamilton County	TN	37405-
Chattanooga	Hamilton County	TN	37406-1322
Chattanooga	Hamilton County	TN	37406-1322
CLEVELAND	BRADLEY	TN	37312-
Cleveland	Bradley County	TN	37312-
Crossville	CUMBERLAND	TN	38555-
DAYTON		TN	37321-1802
Dayton		TN	37321-
Decatur	Meigs County	TN	37322-
Dickson		TN	37055-
ETOWAH	McMinn County	TN	37331-
Franklin		TN	37064-
Gallatin	SUMNER	TN	37066-
KINGSPORT	Sullivan County	TN	37660-
Kingsport	Sullivan County	TN	37660-
KINGSPORT	Sullivan County	TN	37660-
KINGSPORT	Sullivan County	TN	37660-
Knoxville	Knox County	TN	37921-
LEWISBURG	Marshall County	TN	37091-
LOUDON	Loudon County	TN	37774-9499
LOWLAND		TN	
Madison	Davidson County	TN	37115-
Memphis	Shelby County	TN	38108-
Memphis	Shelby County	TN	38108-
Memphis	Shelby County	TN	38101-
MEMPHIS	Shelby County	TN	38127-
Memphis	Shelby County	TN	38127-
MEMPHIS	Shelby County	TN	38127-
MEMPHIS	Shelby County	TN	38108-
MEMPHIS	Shelby County	TN	38109-
MEMPHIS	SHELBY	TN	38126-
MILAN	Gibson County	TN	38358-
Millington	Shelby County	TN	38053-
Mt. Pleasant	MAURY	TN	38474-
Nashville	Davidson County	TN	37210-
Nashville	Davidson County	TN	37204-
NASHVILLE	Davidson County	TN	37211-
Nashville	Davidson County	TN	37209-
NEW JOHNSONVILLE	Humphreys County	TN	37134-
NEW JOHNSONVILLE	Humphreys County	TN	37134-
NEW JOHNSONVILLE	Humphreys County	TN	37134-
NEWPORT	Cocke County	TN	37821-
OAK RIDGE		TN	
OLD HICKORY	Davidson County	TN	37138-3693

35.114200	-85.242910
34.989361	-85.318687
35.075020	-85.337620
35.062360	-85.333980
35.088210	-85.258200
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35.175125	-84.833735
35.187220	-84.828050
35.978000	-85.019200
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36.522220	-82.541100
36.534416	-82.550454
36.550455	-82.634794
36.550455	-82.634794
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35.426310	-86.758430
35.734503	-84.321370
36.153330	-83.204160
36.268890	-86.714440
35.168090	-89.956700
35.170830	-89.994440
35.089300	-90.112630
35.272130	-89.978940
35.261390	-89.977790
35.271600	-89.974070
35.173611	-89.948889
35.085843	-90.083385
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3052		325222		
3053	110055498260	325613	2944611	
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3055	110000370768	336111	3980611	
3056	110000590352	325998	5721911	
3057	110041993545	326199		
3058	110000606933	325110	5632411	
3059	110000599406	325110		
3060	110041116208	325211	5633211	
3061	110000503722	325110	16871811	
3062	110063953191	325110	16873611	
3063	110063953164	325180	16872411	
3064	110000465773	327212	5745811	
3065	110000458898	32552		
3066	110000824537	54171	5746111	
3067	110006126717	325211	4945311	
3068	110060878199	325199		
3069	110031389192	325110	13411911	
3070	110000728062	325110	6152511	NEI12063
3071	110000502901	324110	4924411	
3072	110000463123	325180	4167711	
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3076	110000463178	325110	6421811	
3077	110000463070	325110	4056711	
3078	110012710423	325120		
3079	110021082371	325120	7908111	
3080	110000756361	325110	17110511	
3080	110069500686	325110	17110511	
3081	110000503937	325311		
3082	110033246477	325110	5729211	
3083	110000463098	325199		
3084	110007177768	325110	4056411	
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3086	110023012390	325110	9175811	
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3090	110024599031	325211	13382111	
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3092	110000464239	325320	5654311	
3093	110000464177	424710		
3094	110041990913	324110	4862411	
3095	110000464131	325110	4930211	

E I DUPONT DE NEMOURS & CO INC
Green Plains Obion, LLC
TOHO TENAX AMERICA INC
JAT Systems Inc.
NISSAN NORTH AMERICA, INC.
GENERAL MOTORS LLC-SPRING HILL MFG
KILGORE FLARES COMPANY LLC
VICTOR EQUIPMENT COMPANY INC
Duplicate Entry CHOCOLATE BAYOU PLANT
EQUISTAR CHEMICALS CHOCOLATE BAYOU COMPL
CHOCOLATE BAYOU POLYMERS
MONSANTO CO/ASCEND PERFORMANCE MATERIALS CHOCOLATE BAYOU PLANT
MHBA CHOCOLATE BAYOU PLANT
LAB CHOCOLATE BAYOU PLANT
OWENS CORNING-RANDALL COUNTY
W W Henry Co
3M AUSTIN CENTER
EQUISTAR MATAGORDA PLANT
CELANESE BAY CITY PLANT
OXEA BAY CITY PLANT
BAY CITY PLANT
EXXON MOBIL BAYTOWN REFINERY
BAYTOWN PLANT
EXXON MOBIL CHEMICAL BAYTOWN OLEFINS PLANT
BAYTOWN TERMINAL
THERMO ELASTOMER PLANT
EXXONMOBIL CHEMICAL BAYTOWN CHEMICAL PLANT
ADVANCED AROMATICS
AIR PRODUCTS BAYTOWN PLANT
AIR PRODUCTS BAYTOWN II PLANT
HEXION BAYTOWN
HEXION BAYTOWN
BAYTOWN NITRIC ACID PLANT
BAYER MATERIAL SCIENCE BAYTOWN PLANT
COVESTRO INDUSTRIAL PARK BAYTOWN
CHEVRON PHILLIPS CHEMICAL CEDAR BAYOU PLANT
NITRIC ACID MFG FACILITY
LANXESS CORP BAYTOWN
BEAUMONT PLANT
GOODYEAR TIRE & RUBBER BEAUMONT CHEMICAL PLANT
EXXONMOBIL OIL BEAUMONT POLYETHYLENE PLANT
TOTAL CRAY VALLEY BEAUMONT
BEAUMONT FACILITY
BASF BEAUMONT
COLONIAL STORAGE FACILITY
EXXONMOBIL BEAUMONT REFINERY
EXXONMOBIL OIL BEAUMONT CHEMICAL PLANT

1002 INDUSTRIAL RD
2098 McDonald Road
121 CARDIFF VALLEY RD
13555 Back Valley Road
983 NISSAN DR.
100 SATURN PARKWAY
155 KILGORE DRIVE
3501 MAPLE AVENUE
2 MI S OF INTX OF FM 2917 AND FM 2004
2 MILE WEST FM 2917 ON FM 2004
FM 2004; S OF ALVIN; 2 M W OF FM 2917 ON FM 2004
FM 2917 RD
LOCATED ON FM 2917 APPROX 8 MI S OF INTX OF HWY 35 AND FM 2917
LOCATED ON FM 2917 APPROX 8 MI S OF INTX OF TX HWY 35 AND FM 2917
1701 HOLLYWOOD RD
1101 Avenue G East
6801 RIVER PLACE BLVD
17042 STATE HIGHWAY 60 S
2001 FM 3057
2001 FM 3057 ADMIN BLDG
APP. 10 MI. S.W. OF BAY CITY ON F.M. 3057
2800 DECKER DR
3439 PARK ST
3525 DECKER DR
4604 W BAKER RD
4803 DECKER DR
5000 BAYWAY DR
5501 W BAKER RD
5503 W BAKER RD
5503 W BAKER RD; OFF CARTER RD
8450 W BAY RD
8450 W BAY RD
8490 W BAY RD
8500 W BAY RD
8500 W BAY RD
9500 INTERSTATE 10 E
ON HWY 565 W OF HWY 146
W SIDE OF CHAMBER COUNTY NEXT TO CHAMBER/HARRIS CTY LINE, ON CEDAR BAYOU TAKE ST HWY 146 S FROM I-10
10658 HWY 90
11241 INTERSTATE HWY 10
11440 HIGHWAY 90
11455 IH 10
1400 OLIN RD
14385 W PORT ARTHUR RD
15651 W PORT ARTHUR RD
1795 BURT ST
2775 GULF STATES RD

OLD HICKORY	Davidson County	TN	37138-
RIVES	Obion County	TN	38240-
ROCKWOOD		TN	37854-
Sale Creek	Hamilton County	TN	37373-
SMYRNA	Rutherford County	TN	37167-
SPRING HILL	Maury County	TN	37174-
TOONE	Hardeman County	TN	38381-
ABILENE		TX	
ALVIN	Brazoria County	TX	77512-
ALVIN	Brazoria County	TX	77511-
ALVIN	Brazoria County	TX	77511-
ALVIN	Brazoria County	TX	77511-
ALVIN	Brazoria County	TX	77512-
ALVIN	Brazoria County	TX	77512-
AMARILLO	Randall County	TX	79101-
Arlington	TARRANT	TX	76011-
AUSTIN	Travis County	TX	78726-
BAY CITY	Matagorda County	TX	77414-
BAY CITY	Matagorda County	TX	77414-
BAY CITY	Matagorda County	TX	77414-
BAY CITY	Matagorda County	TX	77414-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77521-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Harris County	TX	77520-
BAYTOWN	Chambers County	TX	77520-
BAYTOWN	Chambers County	TX	77520-
BAYTOWN	Chambers County	TX	
BAYTOWN	Chambers County	TX	77520-
BAYTOWN	Chambers County	TX	77520-
BAYTOWN	Harris County	TX	77521-
BAYTOWN	Chambers County	TX	77520-
BAYTOWN	Chambers County	TX	77520-
BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	77720-
BEAUMONT	Jefferson County	TX	77713-3486
BEAUMONT	Jefferson County	TX	77705-
BEAUMONT	Jefferson County	TX	77703-
BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	
BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	77701-

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3097	110000464159	325110	5655411	NEI12053
3098	110000743900	325199		
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3101	110013881139	325110	6362111	
3102	110040888279	325110	6385311	
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3109	110007175074	211111		
3110	110056955576	325311	6430211	
3111	110043804764	325180	4863711	
3112	110041990646	325199		
3113	110042005843	324110		
3114	110041360014	493110	13376811	
3115	110001866669	493110	13401011	
3116	110041158092	325998	9176511	
3117	110008167633	493110		
3118	110000599273	326113		
3119	110009505428	3251	6584811	
3120	110000854692	486910		
3121		325222		
3122	110000456042	325510	6493111	
3123	110040962768	493110	4055411	
3124	110005110209	332312		
3125	110000460983	325110	4182411	
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3128	110000463533	336611	4861211	
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3132	110000463221	325110	4941411	
3133	110000463212	325110	4925111	
3134	110000506667	325998	6364311	
3135	110041031424	325998	4832811	
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3139	110000465069	325110	5862111	
3140	110038173981	324110	4031311	
3141	110000505640	324110		
3142	110017836733	324110	4945411	

ARKEMA BEAUMONT PLANT
PD GLYCOL
BEAUMONT PLANT
CHEMOURS BEAUMONT ANILINE FACILITY
BEAUMONT MARINE WEST TERMINAL
CHEMOURS BEAUMONT ANILINE FACILITY
BEAUMONT PLANT
ALON USA BIG SPRING REFINERY
BIG SPRING CARBON BLACK
BISHOP FACILITY
OXEA BISHOP
BORGER CARBON BLACK PLANT
PHILTEX RYTON PLANT
DYSON TREATER PLANT
BORGER NITROGEN OPERATIONS
BORGER CARBON BLACK PLT
CHEVRON PHILLIPS CHEMICAL BORGER PLANT
BORGER REFINERY
SOUTHWEST TERMINAL
BROWNSVILLE TERMINAL
CHEM PRUF
INTERCOASTAL TERMINAL
3M CO - BROWNWOOD
Gem Microelectronic Materials L L C
GREENVILLE STATION
OMEGA PLASTICS LLC
PAINT MFG
BULK LIQUIDS STORAGE & DISTRIBUTION TERMINAL
SOLAR TURBINES
JOHANN HALTERMANN / JACINTOPORT PLANT
Lyondell Petrochemical Co Heavy-Haul Dock Wharf
Lost Lake Fleeting Service Loaded Barge Fleet Moo
Southwest Shipyard Yard B Sandblasting Wharf
Western Towing Co Loaded Barge Fleet Moorings
Western Towing Co Oversize Empty Barge Fleet Moo
Western Towing Co Regulated Empty Barge Fleet an
LYONDELL CHEMICAL CHANNELVIEW
EQUISTAR CHEMICALS CHANNELVIEW COMPLEX
TECHNICAL CHEMICAL CO
ALAMO PLANT
HUNTSMAN PETROCHEMICAL CONROE PLANT
HEMPEL COATINGS CONROE PLANT
VALERO CORPUS CHRISTI REFINERY EAST PLANT
EQUISTAR CORPUS CHRISTI PLANT
FLINT HILLS RESOURCES EAST REFINERY
CITGO CORPUS CHRISTI REFINERY EAST PLANT
EAST PLANT REFINERY

2810 GULF STATES RD
3510 GULF STATES RD
5470 N TWIN CITY HWY
5470 N TWIN CITY HWY
6275 HIGHWAY 347
HWY 347 .5 MI S OF INTERX OF HWYS 69 & 347
NEAR DUPONT BEAUMONT WORKS
200 REFINERY RD
PO BOX 470 BIG SPRING, TX. 79720; FROM MIDWAY RD; 1 M N OF IH20; 2.5 M E OF BIG SPRING
5738 COUNTY ROAD 4
FROM BISHOP TX NORTH CITY LIMITS TAKE BUS HWY 77 SOUTH TO FM 4 TURN RIGHT TO PLANT ENTRANCE
2 M W OF BORGER ON HWY 136 THEN N 0.5 M ON FM 1559
2 MI. N.E. OF BORGER ON STATE SPUR 119
5 MI. N.E. OF BORGER, TX.
9021 FM 1551
FROM FM 1559; 0.5 MI N ON TX 136
FROM INTX OF SH SPURS 119 & 245 GO 2 MI NE ON PRIV
STATE HWY SPUR 119 NAPPROXIMATELY 2 MILES NE OF T
10150 SH 48 BROWNSVILLE
14701 SOUTH PORT RD
5224 FM 802
8701 RL OSTOS RD
4501 HIGHWAY 377 S
6200 Mumford Rd.
2856 COUNTY ROAD 2168
1420 VINYLEX DR
1900 NORTH JOSEY LANE
15602 JACINTOPORT BLVD
16504 DE ZAVALA RD
16717 JACINTOPORT BLVD
18222 Wallisville Road
18302 Market Street
18310 MARKET STREET
18350 Market Street
18350 Market Street
18350 Market Street
2502 SHELDON RD
8280 SHELDON RD APPROX 1 MI N OF SHELDON RD & WALL
3327 PIPELINE RD
5450 JEFFERSON CHEMICAL RD
5451 JEFFERSON CHEMICAL RD
600 CONROE PARK NORTH
1300 CANTWELL LN
1501 MCKINZIE RD
1607 NUECES BAY BLVD
1801 NUECES BAY BLVD
1802 NUECES BAY BLVD

BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	77705-
BEAUMONT	Jefferson County	TX	77705-
BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	77701-
BEAUMONT	Jefferson County	TX	77701-
BIG SPRING	Howard County	TX	79720-
BIG SPRING	Howard County	TX	79721-
BISHOP	Nueces County	TX	78343-
BISHOP	Nueces County	TX	78343-
BORGER	Hutchinson County	TX	79007-
BORGER	Hutchinson County	TX	79007-
BORGER	Hutchinson County	TX	
BORGER	Hutchinson County	TX	79007-
BORGER	Hutchinson County	TX	79007-
BORGER	Hutchinson County	TX	79007-
BORGER	Hutchinson County	TX	79007-
BROWNSVILLE	Cameron County	TX	78520-
BROWNSVILLE	Cameron County	TX	78520-
BROWNSVILLE	Cameron County	TX	78520-
BROWNSVILLE	Cameron County	TX	78520-
BROWNWOOD	Cameron County	TX	76801-
Bryan	Brazos County	TX	77807-
CADDO MILLS		TX	
CARROLLTON		TX	75006-
CARROLLTON	Dallas County	TX	75006-
CHANNELVIEW	Harris County	TX	77015-
CHANNELVIEW	Harris County	TX	77530-
CHANNELVIEW	Harris County	TX	77530-
CHANNELVIEW	Harris County	TX	77530-
CHANNELVIEW	Harris County	TX	
Channelview	Harris County	TX	77530-
Channelview	Harris County	TX	
Channelview	Harris County	TX	
Channelview	Harris County	TX	
CHANNELVIEW	Harris County	TX	77530-
CHANNELVIEW	Harris County	TX	77530-
CLEBURNE	Johnson County	TX	76031-
CONROE	Montgomery County	TX	77305-
CONROE	Montgomery County	TX	77301-
CONROE	Montgomery County	TX	77301-
CORPUS CHRISTI	Nueces County	TX	78412-
CORPUS CHRISTI	Nueces County	TX	78412-
CORPUS CHRISTI	Nueces County	TX	78412-
CORPUS CHRISTI	Nueces County	TX	
CORPUS CHRISTI	Nueces County	TX	78407-

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3155	110000606835	325199	7679411	
3156		486110		
3157	110063962430	486110	16867611	
3158	110000463249	325110	4167811	NEI10994
3159	110000463258	325110	4018611	NEI6605
3160	110002131489	325180	4161711	
3161	110000457568	325510	4588411	
3162	110000457416	325612		NEITXT$11243
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3173	110000463301	325199		
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3187	110042061238	324110	6476111	
3188	110022532918	325211		NEITX13927

WILLIAMS TERMINAL HOLDINGS, L.P.
CELANESE LTD CORPUS CHRISTI TECHNICAL CENTER
FHR CORPUS CHRISTI WEST PLANT
CORPUS CHRISTI CRUDE TERMINAL
ELEMENTIS CHROMIUM CORPUS CHRIST TX FACILITY
AIR PRODUCTS LLC
HYDROGEN PLANT INDUST GAS
CORPUS CHRISTI TANK FARM
WEST PLANT FACILITY
Port of Corpus Christi Oil Dock No 11
Port of Corpus Christi Oil Dock No 7
Port of Corpus Christi Oil Dock No 9
Corsicana Techs Inc
GARDENDALE JV/NORTH TERMINAL
GARDENDALE SOUTH PGS GARDENDALE TERMINAL
KMCO CROSBY PLANT
CROSBY FACILITY
OCCIDENTAL CHEMICAL DALLAS
JONES BLAIR DALLAS PLANT
PETRA CHEMICAL CO
DALLAS TERMINAL
Huntsman Chemical Company
DEER PARK PVC
DEER PARK PVC
POLYETHYLENE PLANT
SOLVAY INTEROX
LA PORTE COMPLEX
Duplicate LA PORTE COMPLEX
ROHM AND HAAS TEXAS DEER PARK PLANT
INTERCONTINENTAL TERMINALS CO
POLYPROPYLENE PLANT
GLOBAL OCTANES DEER PARK FACILITY
M T B E PRODUCTION FACILITY
DEER PARK PLANT
LUBRIZOL DEER PARK
HEXION DEER PARK
OXY VINYLS DEER PARK VCM PLANT
HEXION DEER PARK
ROHM AND HAAS TEXAS DEER PARK PLANT
GEO SPECIALTY CHEMICAL
DIMMITT SULFUR PRODUCTS LTD
EBAA IRON EASTLAND PLANT
CAREFUSION LLC
NEWMAN POWER STATION
CHEMOURS BORDERLAND PLANT
WESTERN REFINING EL PASO ALL SITES
RESIN MFG

1802 POTH LANE
1901 CLARKWOOD RD.
2825 SUNTIDE RD
2829 TEXACO RD
3800 BUDDY LAWRENCE DR
5401 UP RIVER RD
5880 UP RIVER RD
5900A UP RIVER RD
7350 IH 37
2733 E. Hwy. 31
587 STEPHENSON RD
WESTERN I 35 FRONTAGE ROAD APPROXIMATELY 0.25 MILES SOUTH OF OXFORD STREET INTERSECTION; 4733 N IH35
16503 RAMSEY RD
18000 CROSBY EASTGATE ROAD
1100 LENWAY ST 75215
2728 EMPIRE CENTRAL
2929 STOREY LN.
4200 SINGLETON BLVD
3892 US HIGHWAY 90 EAST
1000 TIDAL RD
1000 TIDAL RD
1230 BATTLEGROUND RD
1230 BATTLEGROUND RD
1515 MILLER CUT-OFF ROAD
1515 MILLER CUT-OFF ROAD
1900 TIDAL RD
1943 BATTLEGROUND ROAD
2 MI N OF HWY 225 ON BATTLEGROUND RD
2621 TIDAL RD
2621 TIDAL ROAD
41 TIDAL RD
41 TIDAL RD
5900 HIGHWAY 225
5900 HIGHWAY 225
5900 LA PORTE FWY
6600 LA PORTE FWY
739 BATTLEGROUND
1600 US Hwy. 194
702 COUNTY ROAD 442 no. 30
1550 NORTHWESTERN DR
4900 STAN ROBERTS SR AVE
6501 TROWBRIDGE DR
6501 TROWBRIDGE DR
201 CEDAR RD

CORPUS CHRISTI	Nueces County	TX	78407-
CORPUS CHRISTI	Nueces County	TX	78409-
CORPUS CHRISTI	Nueces County	TX	
CORPUS CHRISTI	Nueces County	TX	78402-
CORPUS CHRISTI	Nueces County	TX	78412-
CORPUS CHRISTI	Nueces County	TX	78407-
CORPUS CHRISTI	Nueces County	TX	78469-
CORPUS CHRISTI	Nueces County	TX	78412-
CORPUS CHRISTI	Nueces County	TX	78409-
Corpus Christi	Nueces County	TX	
Corpus Christi	Nueces County	TX	
Corpus Christi	Nueces County	TX	
Corsicana	Navarro County	TX	75110-
COTULLA	La Salle County	TX	78014-
COTULLA	La Salle County	TX	78014-
CROSBY	Harris County	TX	77532-
CROSBY	Harris County	TX	77532-
DALLAS	Dallas County	TX	75037-
DALLAS	Dallas County	TX	75037-
DALLAS	Dallas County	TX	75220-
DALLAS	Dallas County	TX	75037-
Dayton		TX	77535-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
DEER PARK	Harris County	TX	77536-
Dimmitt	Castro County	TX	79027-
EASTLAND		TX	
EL PASO	El Paso County	TX	79912-
EL PASO	El Paso County	TX	79901-
EL PASO	El Paso County	TX	79905-
EL PASO	El Paso County	TX	79905-
ENNIS	ELLIS	TX	75119-

27.811804	-97.435631
27.817540	-97.535930
27.832011	-97.525582
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29.725300	-95.111430
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29.722222	-95.126944
29.725598	-95.110673
29.714980	-95.118540
29.735830	-95.103320
29.716500	-95.092710
34.506940	-102.278890
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31.986810	-106.434210
31.764110	-106.395150
31.768889	-106.401667
32.355490	-96.643330

3189	110000456818	325510	2988311	
3190	110000456818	325510	2988311	
3191	110037967340	325211	9095511	
3192	110033248331	48611		NEI12772
3193	110001143414	928110	4145411	
3194	110000459496	325510		
3195	110000459441	325199	7585311	
3196	110000459389	325998	6738111	
3197	110021145599	325412	5040611	
3198	110000599433	325412	6599411	
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3200	110008170237	325110	5632711	
3201	110005184497	325120	6598211	
3202	110021360230	325110	5632011	NEI2TX039668
3203	110044802292	325211	15635811	
3204	110000743839	325211	4898311	NEI6652
3205	110000463392	325110	4897511	
3206	110000599451	325110	6614511	
3207	110000463427	325110	5861411	NEI8308A
3208	110021132282	486110	7872211	
3209	110041921034	424710		NEI7840
3210	110009493226	42269		
3211	110000754167	325998	5633711	
3212	110028042507	325181		
3213	110000463454	325110	13380011	
3214	110032992215	493110	4981511	NEI12644
3215	110040955927	493110	4169011	
3216	110000463490	325110	6671411	
3217	110037844376	493110	3737711	NEITX20191
3218				
3219	110000456248	325510	4163411	
3220	110000456275	325510	6476811	
3221	110007195944	486110	4162611	
3222	110039111920	486210		
3223	110000457906	325510		
3224	110043790001	325120	5128911	
3225	110010655013	486910		NEI7307
3226	110035195614	325110	13378311	
3227	110009773968			
3228				
3229				
3230	110000462053	325110	6680611	
3231	110058113704	324110		
3232	110008973218			NEI11232A
3233	110000461759	32532	9138011	
3234	110000460947	325199		
3235	110000461045	325211	4056111	NEI8303

Sherwin-Williams (formerly United Coatings)
SHERWIN WILLIAMS ENNIS PLANT
RESIN MFG
PETROLEUM PIPELINE
USAADACENFB FORT BLISS
Trinkote Industrial Finished (formerly Trinity Coatings Company)
FORT WORTH FERRO ORGANIC SPECIALTIES DIV
MORWET DETERGENT PLANT
PHARMACEUTICAL
DSM NUTRITIONAL PRODUCTS
OYSTER CREEK COGENERATION POWER UNIT 8
DOW TEXAS OPERATIONS FREEPORT
FREEPORT HYCO PLANT
HUNTSMAN ETHYLENEAMINES LTD.
BRASKEM AMERICA
SHINTECH INCORPORATED
BASF FREEPORT SITE
FREEPORT PLANT
SCHENECTADY INTERNATIONAL
QUINTANA CRUDE STATION
FREEPORT TERMINAL 1
BASF CORP., FREEPORT MARINE TERMINAL DOCK.
PETROCHEMICAL REFINING
OYSTER CREEK COGENERATION PLANT
NALCO CHAMPION FRESNO
GLENCORE, LTD
GALENA PARK TERMINAL
TEXMARK CHEMICALS, INC.
GALENA PARK TERMINAL
Basis Petroleum Barge Dock No 2 Wharf
Sherwin-Williams Garland
Valspar Coatings - Garland
ODESSA PUMP STATION
GOODRICH COMPRESSOR STATION
Parks Corporation
HAWKINS NITROGEN FACILITY
HEARNE STATION
WE HEREFORD
Western Towing Co Cleaning Plant Wharf
Manchester Terminal Corp Ship Channel Wharf
Manchester Terminal Corp Sims Bayou Wharf
HOUSTON PLANT
HOUSTON REFINING
CHANNEL ENERGY CENTER
Dupont Houston Crop Protection
GEORGIA PACIFIC RESINS, INC.
REICHHOLD CHEMICALS INC

301 W Plant Road
301 WEST PLANT ROAD
SE INTX N MAIN & CEDAR RD
3301 S HIGHWAY 157
APPROX 0.25 MI N OF SGM SIMS AND OLD IRONSIDES DR
1800 PARK PL. AVE
510 E. Central Ave.
611 E NORTHSIDE DR
6201 S FRWY
1000 COUNTY ROAD 227
2301 BRAZOSPORT BLVD
2301 N BRAZOSPORT BLVD
2398 VICTORIA ST
307 CR 624 AT GATE A-38 BLACK
5005 E HWY 332 GATE 9 OC 450
5618 E HWY 332
602 COPPER RD
6213 HWY 332 EAST
702 FM 523
924 HOLLEY ST
CR 731 1/2 MI NE OF INTERX OF CR 731 AND FM 1495
FM 1495/SH 288
PLANT 5 ON CR 229
THE OYSTER CREEK COGENERATION PLANT SITE IS LOCATE
3130 FM 521
12901 AMERICAN PETROLEUM ROAD
1500 CLINTON DR
900 CLINTON DRIVE
906 CLINTON DR
Mayo Shell Road
2802 W. Miller Road
701 Shiloh Road
2.1 M S ON FM 866
228 E FM 1988
3122 College Street
FM 1795 HAWKINS
FRONTAGE RD 1/2 MI S OF HEARNE ON SH 6
3748 S PROGRESSIVE RD
1314 South Main Street
10000 Manchester Street
10000 Manchester Street
11623 N HOUSTON ROSSLYN ROAD, HOUSTON, TX
12000 LAWNDALE ST
12000 LAWNDALE ST, GATE 8
12701 Almeda Rd
1503 HADEN ROAD
1503 HADEN ROAD

Ennis	Ellis County	TX	75119-
ENNIS	Ellis County	TX	75119-
ENNIS	Ellis County	TX	75120-
EULESS		TX	76040-
FORT BLISS	El Paso County	TX	79916-
Fort Worth	Tarrant County	TX	76110-
Fort Worth	Tarrant County	TX	76164-
FORT WORTH	Tarrant County	TX	75106-
FORT WORTH	Tarrant County	TX	76002-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
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FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FREEPORT	Brazoria County	TX	77541-
FRESNO	Fort Bend County	TX	77545-
GALENA PARK	Harris County	TX	77547-
GALENA PARK	Harris County	TX	77457-
GALENA PARK	Harris County	TX	77457-
GALENA PARK	Harris County	TX	77547-
Galena Park	Harris County	TX	
Garland	Dallas County	TX	75041-
Garland	Dallas County	TX	75042-
GOLDSMITH	Ector County	TX	79741-
GOODRICH		TX	
Greenville	HUNT	TX	75401-
HAWKINS	Wood County	TX	75765-
HEARNE		TX	77859-
HEREFORD	Deaf Smith County	TX	79045-
Highlands	HARRIS	TX	77562-
HOUSTON	Harris County	TX	
HOUSTON	Harris County	TX	
HOUSTON	Harris County	TX	77086-
HOUSTON	Harris County	TX	77017-
HOUSTON	Harris County	TX	77017-
Houston	Harris County	TX	77045-
HOUSTON	Harris County	TX	77015-
HOUSTON	Harris County	TX	77015-

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32.304430	-96.614160
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31.903852	-106.297379
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32.650540	-97.316410
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33.135069	-96.125110
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30.863055	-96.577777
34.830580	-102.363040
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3237	110041042591			NEI7491
3238	110024271786	493110	13381011	NEI7825
3239	110001867766	493110	4925411	
3240	110000461009	325110	4924711	NEI6824
3241	110015737210	324110	4762811	
3242	110000462231	325212	4941211	
3243	110056638526	325110	6642711	
3244	110000460965	325180	4058511	
3245	110035360418			
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3247	110000461857	325211		
3248	110000874108	32552		
3249	110000599291	325110	3736811	NEI8101
3250	110000462268	325510	4018811	
3251	110000460821	325520	6422311	
3252		486110		
3253	110001867668	486110	6534911	
3254	110064622207			
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3256	110000460901	325180	4778711	
3257	110000461116	325212		
3258	110000460885	324110	4182511	
3259	110000461535	325510		
3260	110000461107	325110	6642511	
3261	110037966298	493110	9097211	
3262	110063945085	493110	16866511	
3263	110000599807	325110	5746611	NEI11474
3264	110013324045	325180	5862211	
3265	110000746532	325110	5677911	NEI6521
3266	110043694767	493110	8515611	
3267	110000456471	325520		
3268	110000463622	325120	6616311	NEI7852
3269	110063955420	325120	16636311	
3270	110043788719	325110	4055111	
3271	110024422418	325110	4055111	
3272	110008143963	325110	4926811	
3273	110000495241	325211	6536411	
3274	110038705817	325188		
3275	110017874736	325110	9103411	
3276	110000463542	325110	4018511	NEI6578
3276	110000463542	325110	17058711	NEI6578
3277	110000463613	325110	4941611	NEI13236
3278	110000463597	325110	6671911	NEI12286
3279	110034641635	325199		
3280	110000619652	325211	6445111	
3281	110000501341	325110	6510211	NEI7273

AKZO NOBEL SURFACE CHEMISTRY
HOUSTON PLANT
STOLTHAVEN HOUSTON INCORPORATED
HOUSTON FUEL OIL TERMINAL
SASOL CHEMICALS USA GREENS BAYOU PLANT
Duplicate HOUSTON REFINING
GOODYEAR HOUSTON CHEMICAL PLANT
ARKEMA HOUSTON PLANT
GB BIOSCIENCES GREENS BAYOU PLANT
Preservo Paint & Coatings Manufacturing Company
HOLMES PLANT
Cook Composites and Polymers
The RectorSeal Corporation
SHELL TECHNOLOGY CENTER HOUSTON
Courtaulds Coating - Houston (formerly International Paint)
FOSTER PRODUCTS CORP
ENTERPRISE CRUDE HOUSTON STATION (ECHO)
EAST HOUSTON TANK FARM
Duplicate CHANNELVIEW COMPLEX
HOUSTON PLANT
ECO SERVICES OPERATIONS
BAYER HOUSTON PLANT
VALERO PARTNERS HOUSTON
Dupont Powder Coating (formerly AXALTA COATING SYSTEMS LLC, formerly Herberts O'Brien)
FLINT HILLS RESOURCES HOUSTON CHEMICAL
NORTH HOUSTON TERMINAL
APPELT TERMINAL
OCCIDENTAL CHEMICAL CORPORATION/INGLESIDE / OXYCHEM INGLESIDE PLANT
SHERWIN ALUMINA PLANT
CORPUS CHRISTI PLANT / CHEMOURS COMPANY FC INGLESIDE PLANT
INGLESIDE MARINE TERMINAL
SCHNEE-MOREHEAD
LA PORTE FACILITY
LA PORTE SMR
LA PORTE METHANOL
LINDE GAS LA PORTE SYNGAS PLANT
MORGANS POINT COMPLEX
NOLTEX LA PORTE EVOH PLANT
INEOS POLYETHYLENE NORTH AMERICA LA PORTE PLANT
INVISTA S A R L LA PORTE PLANT
E I DU PONT DE NEMOURS LA PORTE PLANT
E I DU PONT DE NEMOURS LA PORTE PLANT
ROHM AND HAAS COMPANY
LYONDELLBASELL ACETYLS
Duplicate EQUISTAR CHEMICALS LA PORTE COMPLEX
TOTAL PETROCHEMICALS USA LA PORTE PLANT
P.P.G. INDUSTRIES, INCORPORATED

15200 ALMEDA RD
15200 ALMEDA ROAD
15602 JACINTOPORT BLVD.
16642 JACINTOPORT BLVD
1914 HADEN RD
2 MI E OF THE 610 & 225 INTERX; 12000 LAWNDALE
2000 GOODYEAR DR
2231 HADEN RD
2239 HADEN RD
2401 Brollier St
2434 HOLMES RD
2434 Holmes Road
2830 Produce Row
3333 HIGHWAY 6 S
6001 Antoine Dr.
6107 INDUSTRIAL WAY
6849 1/2 E SAM HOUSTON PARKWAY S WHICH IS 0.5 MI S OF BELTWAY 8 SOUTH ON HWY 3
7901 WALLISVILLE RD
8280 SHELDON RD
8600 PARK PLACE BLVD
8615 MANCHESTER ST
8701 PARK PLACE BLVD
9701 MANCHESTER ST
9800 Genard Road
9822 LA PORTE FWY
AT THE CORNER OF HARDY RD & FARREL RD; 17724 E HARDY RD
EAST OF BELTWAY 8 AND NORTH OF JACINTOPORT BOULEVARD NEAR THE HOUSTON SHIP CHANNEL
1249 STATE HIGHWAY 361
4633 HWY 361 E
HWY 361, 1 MI W OF INGLESIDE TEXAS
SOUTH END OF FM 1069
111 N. Nursery Rd
10202 STRANG RD.
11450 W FARIRMONT PKWY
11603 STRANG RD
11603 STRANG RD
1200 N BROADWAY ST
12220 STRANG RD
1230 INDEPENDENCE PKWY S
12455 STRANG RD
12501 STRANG RD
12501 STRANG RD
13300 BAY AREA BOULEVARD
1350 MILLER CUT OFF RD
1515 MILLER CUT OFF RD
1818 INDEPENDENCE PKWY S
1901 AVENUE H AND 16TH STREET

HOUSTON	Fort Bend County	TX	77053-
HOUSTON	Harris County	TX	77053-
HOUSTON	Harris County	TX	77015-
HOUSTON	Harris County	TX	77530-
HOUSTON	Harris County	TX	77015-
HOUSTON	Harris County	TX	77017-
HOUSTON	Harris County	TX	77017-
HOUSTON	Harris County	TX	77001-
HOUSTON	Harris County	TX	77001-
Houston	Harris County	TX	77054-
HOUSTON	Harris County	TX	77051-
Houston	Harris County	TX	77051-
Houston	Harris County	TX	77023-
HOUSTON	Harris County	TX	77082-
Houston	Harris County	TX	77091-
HOUSTON	Harris County	TX	77011-
HOUSTON	Harris County	TX	77034-
HOUSTON	Harris County	TX	77029-
HOUSTON	Harris County	TX	77530-
HOUSTON	Harris County	TX	77017-
HOUSTON	Harris County	TX	77012-
HOUSTON	Harris County	TX	
HOUSTON	Harris County	TX	77012-
Houston	Harris County	TX	77041-
HOUSTON	Harris County	TX	77001-
HOUSTON	Harris County	TX	77073-
HOUSTON	Harris County	TX	77015-
INGLESIDE	San Patricio County	TX	78362-
INGLESIDE	San Patricio County	TX	78362-
INGLESIDE	San Patricio County	TX	78362-
INGLESIDE	San Patricio County	TX	78362-
Irving	DALLAS	TX	75060-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77572-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77536-
LA PORTE	Harris County	TX	77571-

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29.757110	-95.121420
29.764250	-95.177270
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29.704391	-95.255214
29.760597	-95.171863
29.762500	-95.171389
29.670700	-95.391990
29.672040	-95.391620
29.709080	-95.329790
29.726440	-95.643940
29.855150	-95.473410
29.753300	-95.311010
29.794780	-95.285250
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29.700264	-95.036967
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3282	110000463365	562212	6534811	
3283	110017769734	325110	4057611	NEI8259
3284	110000757752	493110	4058611	
3285	110000463686	325110	4778011	
3286	110000463374	325110	4927011	NEI12180
3287	110000463631	325211	9144811	
3288		325110	4033911	
3289	110000756717	325180	4925711	
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3291	110064100084	325199	6142611	
3292	110054184235	325193	16669711	
3293	110031019822	325211	13399711	
3294	110038096413	325120	9123011	
3295	110000743704	325110	4941511	NEI7296
3296	110021137330	486110	7720811	
3297	110041047284	325211	4863811	
3298	110017769789	325211	5631411	NEI12810
3299	110000746444	331511		
3300	110000599139	3251	6903311	
3301	110041231985	325110	3025611	
3302	110000458406	325180	4982111	
3303	110000458380	325211		
3304	110000458424	325110	6809411	NEI2TX20344
3305	110040890738	325110	6600111	NEI12813
3306	110000463702	325211	5728911	NEI7056
3307	110006533359	325110	6599811	
3308	110000458781	339991	7664311	NEI7752
3309	110033444850	493110	6444711	
3310	110008146158	493110	4929111	
3311	110069449289	325212	6386311	NEI7080
3312	110045563975	325199		NEI6886
3313	110000463917	325110	6385211	
3314				
3315	110000599816	325180	6674911	
3316	110000466175	325212		
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3318	110005064964	213112		NEITX13515
3319	110007182360	325110	5019011	
3320	110017746368	325110	4190211	
3321	110022523982	325110	10678011	
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3324	110041004089	325211	5780511	
3324	110034635367	325211	5780511	
3325	110064446531	325212		
3325	110000506159	325212		
3326	110038166392	325212	5780411	

CLEAN HARBORS DEER PARK
GEON COMPANY
VOPAK TERMINAL DEER PARK
DOW CHEMICAL LA PORTE SITE
AKZO NOBEL CHEMICALS DEER PARK
LA PORTE PLANT
LAPORTE PAO FACILITY
BATTLEGROUND SITE
AMERICAN ACRYL PASADENA
P Chem Inc
DIAMOND ETHANOL LLC
WESTLAKE LONGVIEW
LONGVIEW POX ASU PLT
EASTMAN CHEMICAL TEXAS OPERATIONS
LONGVIEW TANK FARM
LONGVIEW FACILITY
GEORGIA-PACIFIC RESINS LUFKIN PLANT
LUFKIN INDUSTRIES FOUNDRY & POWER TRANSMISSION MFG FACILITIES
Gem Microelectronics Materials L L C
ALCOHOL PURIFICATION & ESTERS
MARSHALL PLANT
Cook Composites and Polymers
MARSHALL PLT
ENTERPRISE PRODUCTS OPERATING, L.P.
EXXONMOBIL CHEMICAL MONT BELVIEU PLASTICS PLANT
EAST STORAGE/SPLITTER III FACILITY
PARKER HANNIFIN ENGINEERED POLYMER SYSTEMS DIVISION
UNOCAL / BEAUMONT TERMINAL
NEDERLAND MARINE TERMINAL
DUPONT PERFORMANCE ELASTOMERS LLC
BMC HOLDINGS INC
LUCITE BEAUMONT SITE
Associated Marine Services Dock No 1
GENERAL CHEMICAL
AMERIPOL SYNPOL ODESSA PLANT
HUNTSMAN POLYMERS CORPORATION
ODESSA PETROCHEMICAL PLT
CHEVRON PHILLIPS CHEMICAL SWEENY COMPLEX
DUPONT SABINE RIVER WORKS
INVISTA SARL SABINE RIVER SITE
HALAR TERPOLYMER POWDER
LANXESS ORANGE PLANT
ORANGE PLANT
ORANGE PLANT
FIRESTONE POLYMERS ORANGE PLANT
FIRESTONE POLYMERS ORANGE PLANT
ORANGE PLANT

2027 INDEPENDENCE PKWY S
2400 MILLER CUTOFF ROAD
2759 INDEPENDENCE PKWY S
550 INDEPENDENCE PKWY S
730 INDEPENDENCE PKWY S
8811 STRANG RD
MILLER CUT OFF RD GATE 11
NEAR THE INTERX OF HWY 134 & PARK RD 1836
STATE HIGHWAY 146 AND PORT RD
100 Old Latexo Rd.
103 S FM 2646
2290 CALLAHAN RD
2292 CALLAHAN RD
300 KODAK BLVD
AT THE LONGVIEW TANK FARM
HWY 149 AT KODAK BLVD; FROM HWY 120 TAKE EXIT 595 TO HWY 322 S; DRIVE 0.8 MI CROSS RAILROAD & TURN E
1429 E LUFKIN AVE
435 JEFFERSON AVE
100 U.S. Hwy. 287 N.
22102 SH 6
3200 W UNIVERSITY
5851 FM 1998
710 BUSSEY ROAD
10207 FM 1942
13330 HATCHERVILLE RD
316 S MAIN ST
403 INDUSTRIAL DR
1500' E INTX S THWY 366 & ST HWY 347
2200 N HIGHWAY 347
5470 N TWIN CITY HWY
5474 N TWIN CITY HWY
6350 N TWIN CITY HWY
State Highway 366
5302 County Rd. 2047
2000 EAST POOL ROAD
2400 S GRANDVIEW AVE
2505 SOUTH GRANDVIEW ST.
21441 LOOP 419
3055 FM-1006 S
3055A FM 1006
4059 FM 1006
4647 FM 1006 ORANGE
5309 FM 1006
5309 FM 1006
5713 FM 1006
5713 FM 1006
5713 FM 1006

LA PORTE	Harris County	TX	77536-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77572-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
LA PORTE	Harris County	TX	77571-
Latexo	Houston County	TX	75849-
LEVELLAND	Hockley County	TX	79336-
LONGVIEW	Harrison County	TX	78602-
LONGVIEW	Harrison County	TX	75603-
LONGVIEW	Harrison County	TX	75607-
LONGVIEW	Gregg County	TX	75604-
LONGVIEW	Harrison County	TX	75607-
LUFKIN	Angelina County	TX	75901-
LUFKIN	Angelina County	TX	75904-
Mansfield	Tarrant County	TX	76063-
MANVEL	Brazoria County	TX	77578-
MARSHALL	Harrison County	TX	75670-
Marshall	Harrison County	TX	75672-
MARSHALL	Harrison County	TX	75670-
MONT BELVIEU	Chambers County	TX	77580-
MONT BELVIEU	Chambers County	TX	77580-
MONT BELVIEU	Chambers County	TX	77580-
NACOGDOCHES	Nacogdoches County	TX	75964-
NEDERLAND	Jefferson County	TX	77627-
NEDERLAND	Jefferson County	TX	77627-
NEDERLAND	Jefferson County	TX	77627-
NEDERLAND	Jefferson County	TX	77627-
NEDERLAND	Jefferson County	TX	77701-
Nederland	Jefferson County	TX	
Odem	San Patricio County	TX	78370-
ODESSA	ECTOR	TX	
ODESSA	ECTOR	TX	79766-
ODESSA	ECTOR	TX	79763-
Old Ocean	Brazoria County	TX	77480-
ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	
ORANGE	Orange County	TX	
ORANGE	Orange County	TX	77630-

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29.710300	-95.066500
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29.600270	-95.020000
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3331	110038029111	325180	6520011	
3332	110000717298	325110		NEI7384
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3333	110000499041	325110	6421611	
3334	110067263071	325110	4166811	NEI6934
3334	110067263071	325110	6421611	NEI6934
3335	110000462801	325180	4778611	
3336	110000462883	325180	4058711	
3337	110040993397	325110	7721311	NEI6726
3338	110031409973	325110	4862611	
3339	110000462829	325199		NEI10971
3340	110001869559	221320	3737011	
3341	110000463007	325110	4924311	
3342	110000462794	325110	4168111	
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3344	110000463034	325110	4941911	
3345	110000462758	325120	4925011	
3346	110000751758	325211		NEI11268
3347	110041043634	325211	4980911	
3348	110000462838	325180	6429011	
3349	110000462892	325211	4166911	
3350	110000462847	325211		NEITXT$11667
3351	110041061677	325211	6655511	
3352	110000462909	325110	6534611	NEI6735
3353	110000462936	325110	4168911	
3354	110044232773	325110	4057711	
3355	110022810573	325180	9102811	
3356	110000462981	325998	4925311	
3357	110000462856	325110	4055511	
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3359	110059763000	325120	6510311	
3360	110043799958	325211	6510111	
3361	110022398500	325199		
3362	110000462678	325199	6693011	
3363	110000462632	325312	6616511	
3364	110056955987	325110	6536811	NEIMN1243
3365	110040881819	325180	6421911	
3366	110000462623	325110		
3367	110033884401	493110	6616011	
3368	110009494993	486910	4056011	NEITXRHG0467
3369	110002081942	325110	4777211	NEI11348
3370	110000462605	325211	4926411	
3371	110000504892	493110	4861511	

ORANGE PLANT
ECHO CARBON BLACK PLANT
W & W FIBERGLASS TANK CO
PAMPA PLANT
PAMPA DEVELOPMENT & MANUFACTURING CENTER
CELANESE LIMITED PAMPA PLANT
PASADENA PLANT / LUBE ADDITIVES PLANT
PASADENA PLANT / LUBE ADDITIVES PLANT
BIGLER LAND LLC / PASADENA PLANT
BIGLER LAND LLC / PASADENA PLANT
PASADENA CATALYSTS
HALDOR TOPSOE
NISSEKI CHEMICAL TEXAS INC BAYPORT PLANT
DIXIE CHEMICAL BAYPORT FACILITY
BAYPORT FACILITY
BAYPORT FACILITY
LYONDELL CHEMICAL BAYPORT CHOATE PLANT
ROGER W POWELL PLANT
PASADENA REFINING SYSTEM
ATHLON SOLUTIONS BAYPORT PLANT
AIR LIQUIDE LARGE INDUSTRIES US
KURARAY COMPANY INC
KURARAY AMERICA EVALBU
PEROXYCHEM BAYPORT TEXAS FACILITY
BAYPORT POLYMERS
BAYPORT HDPE PLANT
BAYPORT HDPE PLANT
BAYPORT FACILITY
LUBRIZOL BAYPORT PLANT
AKZO NOBEL FUNCTIONAL CHEMICALS PASADENA
ALBEMARLE BAYPORT PLANT
BAYPORT PLANT
BAYPORT CHEMICAL PLANT
PASADENA PLASTICS COMPLEX
PASADENA FACILITY
AIR PRODUCTS PASADENA PLANT
SEKISUI SPECIALTY CHEMICALS AMERICA PASADENA PLANT
BP Amoco Chemical Co
AGRIFOS FERTILIZER PASADENA
ALBEMARLE CORP HOUSTON PLANT
POLYSILICON FACILITY
INEOS AMERICAS PASADENA SITE
JEFFERSON ST TRUCK RACK
MARATHON ASHLAND PIPE LN
BASF PASADENA
PASADENA PVC
PASADENA TERMINAL

FM 1006 DUPONT RD
N ON HWY 87; E 3 M ON FM 1130
116 S PRICE RD
3 M SW ON US HWY 60
5 MILES WEST ON US HWY 60
8201 Fm 2300
1000 N SOUTH AVE
1000 N SOUTH AVE
1000 N SOUTH ST
1000 N SOUTH ST
10001 CHEMICAL RD
10010 BAYPORT RD
10500 BAY AREA BLVD.
10601 BAY AREA BLVD
10701 BAY AREA BLVD
10800 BAY AREA BLVD
10801 CHOATE RD
11002 CHOATE RD
111 RED BLUFF RD
11200 BAY AREA BLVD
11400 BAY AREA BLVD
1150 BAY AREA BLVD
11500 BAY AREA BLVD BAY AREA & CHOATE RD
12000 BAY AREA BLVD
12001 BAY AREA BLVD
12212 PORT RD
12212 PORT RD
12222 PORT RD
12801 BAY AREA BLVD
12900 BAY PARK RD
13000 BAYPARK RD
13200 BAY PARK RD
13441 BAY AREA BLVD
1400 JEFFERSON
1423 HWY 225
1423 PASADENA FWY
1423 PASADENA FWY
1500 N. S. St.
2001 JACKSON RD
2500 N SOUTH ST
3000 NORTHSOUTH ST
3503 PASADENA BLVD
400 N JEFFERSON ST
431 N. PRESTON
4403 LA PORTE ROAD
4403 PASADENA FWY
530 WITTER ST

ORANGE	Orange County	TX	77630-
ORANGE	Orange County	TX	77630-
PAMPA	Gray County	TX	79065-
PAMPA	Gray County	TX	79065-
PAMPA	Gray County	TX	79065-
PAMPA	Gray County	TX	79065-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77506-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77586-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77571-
PASADENA	Harris County	TX	77058-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77506-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77506-
PASADENA	Harris County	TX	77506-
Pasadena	Harris County	TX	77503-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77506-

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3376	110042082475	325110	4057911	
3377	110038159701	325613	14997411	
3378	110030493320	325120	10679911	
3379	110000462945	325110	6671611	NEI7279
3380	110037967377	325110	6421511	
3381	110021094625	325110		
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3383	110018925957	325211	5633411	
3384	110000606997	325180	5846711	
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3386	110000464006	324110	4863211	
3387	110020148008	325110	6158411	
3388	110035367643	325120	13408011	
3389	110000464042	325110	13381911	
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3393	110001875695	486910	6430511	
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3396	110000464024	324110	5650711	
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3408	110000599567	325110		
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3414	110000504240	493110	6671511	
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3416	110000504419	493110	4925511	
3417	110063955402	325211	16637711	
3418	110007175154	325110	5846511	

BAYPORT UNDERWOOD PLANT
SUNOCO BAYPORT BPT1
KANEKA PASADENA SITE
CLEAR LAKE OPERATIONS
CELANESE CLEAR LAKE PLANT
CLARIANT CLEAR LAKE PLANT
LINDE CLEAR LAKE PLANT
GULF BAYPORT CHEMICALS LP/LONZA INCORPORATED
PASADENA PLANT
ENRON METHANOL COMPANY
Martin Resources (Plainview)
FORMOSA POINT COMFORT PLANT
POINT COMFORT PLANT
EL VISTA TANK FARM
VALERO PORT ARTHUR REFINERY
CHEVRON CHEMICAL COMPANY
PRAXAIR PORT ARTHUR HYDROGEN FACILITY
KMCO PORT ARTHUR
PORT ARTHUR REFINERY
FLINT HILLS RESOURCES PORT ARTHUR FACILITY
PORT ARTHUR PLANT
PORT ARTHUR TANK FARM
TOTAL PETRO CHEMICALS & REFINING USA PORT ARTHUR REFINERY
VEOLIA ES TECHNICAL SOLUTIONS
PORT ARTHUR REFINERY
CHEVRON PORT ARTHUR DISTRIBUTION CENTER
PRAXAIR PORT ARTHUR PLANT
PORT ARTHUR PLANT
NAFTA REGION OLEFINS COMPLEX
BASF TOTAL FINA NAFTA REGION OLEFINS COMPLEX
AIR PRODUCTS PORT ARTHUR FACILITY
INEOS GREEN LAKE PLANT
PORT NECHES TERMINAL
LION ELASTOMERS
TPC GROUP PORT NECHES OPERATIONS
PORT NECHES ASU COGEN PLANT
HUNTSMAN PORT NECHES
PORT NECHES OPERATIONS C4 PLANT
REFUGIO COMPRESSOR STATION
ALCOA ROCKDALE OPERATIONS
STAR LAKE TERMINAL
CLAM LAKE COMPR STA 1
LBC HOUSTON BAYPORT TERMINAL
Celanese LTD Bayport Terminal Barge Slip
TANKER TERMINAL BAYPORT
SEADRIFT POLYPROPYLENE PLANT
UCC SEADRIFT OPERATIONS

5761 UNDERWOOD RD
5761 UNDERWOOD RD
6161 UNDERWOOD RD
9502 B BAYPORT BLVD B
9502 BAYPORT BLVD
9502 BAYPORT BLVD
9502 BAYPORT BLVD
9700 BAYPORT BLVD.
HWY 225
HWY 225 PASADENA
1920 State Hwy 194 W
201 FORMOSA DR
LOCATED S OF POINT COMFORT & SW OF INTERX OF SH 35 & FM 1593 W OF FM 1593 & E OF LAVACA BAY
.5 MI. N. OF THE INTERSECTION OF HWY. 73 & F.M. 82
1801 GULFWAY DR
2001 SOUTH GULFWAY DRIVE (IN THE OLD CHEVRON REFIN)
2100 HOUSTON AVE (W/IN MOTIVA REFINERY)
2450 S GULFWAY DR PORT ARTHUR
32ND ST & HWY 366
4241 SAVANNAH AVE
4245 SAVANNAH AVE
6300 W PORT ARTHUR RD
7600 32ND ST
7665 HWY 73
AT THE NORTH END OF HOUSTON AVE
END OF W 7TH ST GATE 1
FROM INTX OF HWY 69 MEMORIAL BLVD AND HWY 73 GO 2.1 MI SE ON HWY 69 GO R ON GULFWAY DR HWY 87 FOR 4.
HWY 73 WEST
INTX OF HWY 366 & HWY 87
ON SH 366 GATE 99 AT INTXN HWY 366 & HWY 73
S GULFWAY DR WITHIN CLARK REFINERY
13050 STATE HIGHWAY 185 N
100 E PORT NECHES AVE
1615 MAIN ST
2102 SPUR 136
2121 PARK ST
6001 HIGHWAY 366
SPUR 136 & HWY 366
185 FAIRGROUNDS RD
4069 CHARLES MARTIN HALL RD
11 MI W FROM SABINE PASS ON HWY 87, 10 MI NW ON MC
HWY 87 S CLAM LAKE RD
11666 PORT RD
11807 Port Road
12211 PORT RD
7501 SH1985 N BLDG 101
7501 STATE HIGHWAY 185

PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77501-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77507-
PASADENA	Harris County	TX	77503-
PASADENA	Harris County	TX	
Plainview	Hale County	TX	79072-
POINT COMFORT	Calhoun County	TX	77978-
POINT COMFORT	Calhoun County	TX	77978-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	
PORT ARTHUR	Jefferson County	TX	
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77641-
PORT ARTHUR	Jefferson County	TX	
PORT ARTHUR	Jefferson County	TX	77640-
PORT ARTHUR	Jefferson County	TX	77642-
PORT ARTHUR	Jefferson County	TX	77640-
PORT LAVACA	Calhoun County	TX	77979-
PORT NECHES	Jefferson County	TX	77651-
PORT NECHES	Jefferson County	TX	77651-
PORT NECHES	Jefferson County	TX	77651-
PORT NECHES	Jefferson County	TX	77651-
PORT NECHES	Jefferson County	TX	
PORT NECHES	Jefferson County	TX	77651-
REFUGIO	Refugio County	TX	78377-
ROCKDALE		TX	76567-
SABINE PASS	Jefferson County	TX	
SABINE PASS	Jefferson County	TX	77655-
SEABROOK	Harris County	TX	77586-
Seabrook	Harris County	TX	77586-
SEABROOK	Harris County	TX	77586-
SEADRIFT	Calhoun County	TX	77983-
SEADRIFT	Calhoun County	TX	77983-

29.632290	-95.080460
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29.623080	-95.085500
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29.626880	-95.060700
29.625360	-95.063650
29.615260	-95.061660
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29.902260	-94.009640
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29.827900	-93.964210
29.967420	-93.888330
29.892778	-93.973333
29.890470	-93.976590
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3426	110000465728	325180	4030411	
3427	110000465719	324110	4030511	
3428	110000602170	424710		NEI7791
3429	110000497793	424710	2860911	
3430	110040617589	324110	5018711	
3431	110000504348	326140	4188211	NEI10975
3432				
3433	110017386693	4883		
3434	110017386700	4883		
3435				
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3437	110022411530	325120	9132211	
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3439	110000463864	325110	6615111	NEI6503
3440	110041056184	493110	6642411	
3441	110002400642	493110		NEI6577
3442	110059763536	324110		
3443	110028187049	325110	3930711	
3443	110028187049	325110	10722911	
3443	110005030572	325110	3930711	
3443	110005030572	325110	10722911	
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3445	110000463775	325180	17109811	
3446	110000505524	325110	3967011	
3447	110000619466	325199		
3448	110000463800	325199		NEI13012
3449	110000825037	325120	6420711	
3450	110021086778	4883		
3451				
3452				
3453	110001867329	486110	7720111	
3454	110040927067	325110	4837611	
3455	110025330602	32511		NEI7383
3456	110040863054	324110	4033811	
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3458	110000462375	325510	6681411	
3459	110000598933	331511	4032011	
3460	110000458488	324110	5763911	
3461	110000460144	325998	5680811	
3462	110000464391	325110	5679711	

SOUTH HAMPTON RESOURCES SILSBEE
SOUR LAKE STATION
SOUR LAKE
OLTON PUMP STATION
Fibergrate Composite Structures, Incorporated
SUGAR LAND PLANT
SLAUGHTER PUMP STATION
CARBON BLACK PLANT
VALERO MCKEE REFINERY
JONES CREEK TERMINAL
CONOCOPHILLIPS CO., SAN BERNARD TERMINAL DOCK NO. 1
SWEENY REFINERY PETROCHEM
TEMPLE PLANT
Texas City Terminal Railway Co Dock No 16
Phibro Energy USA Inc Dock No 56 - 57
Texas City Terminal Railway Co Dock No 59
Texas City Terminal Railway Co Dock No 18
Valero Refining Co. Texas
TEXAS CITY HYDROGEN COMPLEX
AMOCO OIL CO., DOCKS NOS. 37 AND 38.
EASTMAN CHEMICAL TEXAS CITY
NUSTAR TEXAS CITY TERMINAL 1
STAN TRANS INCORPORATED
BLANCHARD REFINING GALVESTON BAY REFINERY
TEXAS CITY CHEMICAL PLANT / INEOS STYRENICS TEXAS CITY PLANT
TEXAS CITY CHEMICAL PLANT / INEOS STYRENICS TEXAS CITY PLANT
TEXAS CITY CHEMICAL PLANT / INEOS STYRENICS TEXAS CITY PLANT
TEXAS CITY CHEMICAL PLANT / INEOS STYRENICS TEXAS CITY PLANT
OILTANKING TEXAS CITY TERMINAL
DALLAS GROUP OF AMERICA INC
UNION CARBIDE TEXAS CITY
ISP TECHNOLOGIES TEXAS CITY PLANT
SEA LION TECHNOLOGY INC
TEXAS CITY
AMOCO CHEMICAL CO., DOCK NO. 51 - 52.
Texas City Terminal Railway Co Dock No 14
Texas City Terminal Railway Co Dock No 15
SEAWAY TEXAS CITY STATION
ISP TEXAS CITY
BP CHEMICAL CO DOCKS DIV
TEXAS CITY REFINERY
VALERO THREE RIVERS REFINERY
American Coatings
TYLER PIPE
DELEK TYLER REFINERY
VERNON PLANT
INVISTA SARL

7752 FM 418
129 N CANON ST
APPROX 0.5 MI. N. OF THE INTERSECTION OF HWY. 105 & HWY. 326
5 M S OF SPRINGLAKE ON HWY 385
900 FM 205
7701 HWY 90 A
15 MI SSW OF WHITEFACE6 MI S OF 1585 AND 4 MIE OF FM 214
2 M NW OF SHAMROCK MCKEE REFINERY
6701 FM 119
36 3.5 MI E OF 288
AT THE END OF C.R. 321 OR ON AVE "A" (C.R. 372) 2
HWY 35 AND 524 AT OLD OCEAN
3000 PEGASUS DRIVE
1075 Dock Road
1151 Industrial Canal Road
1251 Industrial Canal Road
1275 Dock Road
1301 LOOP 197 S
1720 GRANT AVE, GATE 16
1851 DOCK ROAD
201 BAY ST S
201 DOCK RD
201 MAIN DOCK ROAD
2401 5TH AVE S
2800 FM 519 E
2800 FM 519 E
2800 FM 519 E
2800 FM 519 E
2800 LOOP 197 S
301 DOCK RD
3301 5TH AVE S
4501 ATTWATER AVE
5700 CENTURY BLVD
703 6TH STREET SOUTH
851 INDUSTRIAL CANAL ROAD
901 Dock Road
921 Dock Road
E SIDE ST HWY 3 BETWN INTX 197 & 146
HWY 146 & INDUSTRIAL RD
INDUSTRIAL CANAL RD PO BOX 568
LOOP 197 S @ 14TH ST
301 LEROY ST
10625 MAHAFFEY RD
11721 US HIGHWAY 69 N
1702 E COMMERCE ST
201 HARRISON ST
2695 OLD BLOOMINGTON RD N

SILSBEE	Hardin County	TX	77656-
SOUR LAKE	Hardin County	TX	77659-
SOUR LAKE	Hardin County	TX	77659-
SPRINGLAKE	Lamb County	TX	79082-
Stephenville	Erath County	TX	76401-
SUGAR LAND	Fort Bend County	TX	77478-
SUNDOWN	Cochran County	TX	79372-
SUNRAY	Moore County	TX	79086-
SUNRAY	Moore County	TX	79086-
SWEENY	Brazoria County	TX	77541-
SWEENY	Brazoria County	TX	77480-
SWEENY	Brazoria County	TX	77480-
TEMPLE	Bell County	TX	76501-
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	77592-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77592-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77590-
TEXAS CITY	Galveston County	TX	77592-
TEXAS CITY	Galveston County	TX	77590-
THREE RIVERS	Live Oak County	TX	78071-
Tomball	HARRIS	TX	77375-
TYLER	Smith County	TX	75701-
TYLER	Smith County	TX	75701-
VERNON	Wilbarger County	TX	76384-
VICTORIA	Victoria County	TX	77905-

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3469	110000717500	325211	7557611	
3470	110000468887	325920	6986711	
3471		325222		
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3504	110002378276	325222		
3505	110056966948	325220		
3506	110000343147	325220	4004311	
3507	110000342237	326299	5769611	
3508	110000342451	325411		

INVISTA SARL
LYONDELL PETROCHEMICAL VICTORIA
VIDOR COMPRESSOR STATION
Magnablend Inc
SOUTHERN FRAC LLC
LANXESS ORANGE PLANT
American Pacific Corp Utah Ops
Genpak Corporation: Polystyrene Foam Production Facility
Dyno Nobel Inc Lehi Site B
ATK LAUNCH SYSTEMS-BACCHUS
HEXEL CORPORATION (FORMER HERCULES)
Big West Oil LLC: Big West Oil Refinery
Compass Minerals Ogden Inc: Production Plant
Thatcher Co
CHEVRON USA
Geneva Nitrogen Inc: Geneva Nitrogen Plant
Hexcel Corporation- Salt Lake Operations
Silver Eagle Refining - Woods Cross Inc.- Petroleum Products Refining
AMERICAN FIBERS & YARNS AFTON FACILITY
Boeing Company
WOLVERINE ADVANCED MATERIALS - BLACKSBURG
WOLVERINE ADVANCED MATERIALS - CEDAR RUN
Arkema Inc
Cook Composites and Polymers
DuPont Teijin Films
HONEYWELL RESINS & CHEMICALS LLC
Dupont De Nemours E I & Company Inc James River Pl
Honeywell International Inc - Colonial Heights
Colonial Pipeline Company Mitchell Junction
Arkema Inc
Eastman Chemical Resins Incorporated
SOLENIS LLC
INGEVITY VIRGINIA CORPORATION
Meadwestvaco Virginia Specialty Chemicals Div
DANCHEM TECHNOLOGIES INC
Merck Sharp & Dohme Corporation
DUPONT FRONT ROYAL SITE
HONEYWELL INTERNATIONAL INC
HERCULES INC AQUALON DIV
HONEYWELL RESINS AND CHEMICALS LLC -HOPEWELL
VCI LYNCHBURG FOUNDRY
Siegwerk Inc. - Lynchburg Facility (formerly World Color)
Invista / DUPONT MARTINSVILLE PLANT
CELANESE ACETATE LLC
DUKE ENERGY GENERATION SERVICES OF NARROWS, LLC
KINYO VIRGINIA INCORPORATED
AMPAC FINE CHEMICALS VIRGINIA, LLC

2695 OLD BLOOMINGTON RD N
2699 OLD BLOOMINGTON RD N
HIGHWAY 105 SOUTH ON MANSFIELD FERRY
100 W. Sterrett Rd.
1805 HOWARD RD
4647 FM 1006
10622 W. 6400 N.
2840 West Highway 56
9210 W. 1750 N.
5000 S 8400 W
PLANT 3 GRAPHITE FIBER PROD.
333 W Center St
765 N 10500 W
1905 Fortune Rd.
2351 NORTH 1100 WEST
1165 North 1600 West
6800 W 5400 S
2355 So. 1100 West
10368 CRITZER SHOP RD
929 Long Bridge Dr
201 INDUSTRIAL PARK RD
3175 STATE STREET
601 TightSqueeze Industrial Rd
920 TIGHTSQUEEZE INDUSTRIAL ROAD
3600 DISCOVERY DR
4101 BERMUDA HUNDRED RD
1201 Bellwood Rd
15801 Woods Edge Rd
425 Duncan Store Road
27047 Shady Brook Trail
27117 Shady Brook Trail
27123 SHADY BROOK TRAIL
958 E RIVERSIDE ST (or Washington Street)
Washington St
1975 OLD RICHMOND RD
2778 South East Side Highway
7961 WINCHESTER ROAD
105 WINSTON CHURCHILL DR
1111 HERCULES RD
905 E RANDOLPH RD
1132 MT ATHOS RD
4225 Murray Place
1 DU PONT RD
3520 VIRGINIA AVE
3520 VIRGINIA AVE
290 ENTERPRISE DR
2820 N NORMANDY DR

VICTORIA	Victoria County	TX	77905-
VICTORIA	Victoria County	TX	77905-
VIDOR	Orange County	TX	77662-
Waxahachie	Ellis County	TX	75165-
WAXAHACHIE	Ellis County	TX	75165-
WEST ORANGE		TX	77631-
Cedar City	Iron County	UT	84720-
Cedar City	Iron County	UT	84720-
Lehi	Utah County	UT	84043-3960
MAGNA		UT	84044-
MAGNA		UT	84044-
North Salt Lake	Davis County	UT	84054-
Ogden	Weber County	UT	84404-
Salt Lake City	Salt Lake County	UT	84104-
UTAH	Salt Lake County	UT	84116-
Vineyard	Utah County	UT	84057-
West Valley City	Salt Lake County	UT	84118-
Woods Cross	Davis County	UT	84087-
AFTON		VA	22920-
Arlington		VA	22202-
BLACKSBURG	Montgomery County	VA	24060-
BLACKSBURG	Montgomery County	VA	24060-
Chatham	Pittsylvania County	VA	24531-
Chatham	Pittsylvania County	VA	24531-
Chester	Chesterfield County	VA	23836-
CHESTER	Chesterfield County	VA	23836-
Chesterfield	Chesterfield County	VA	23237-
Colonial Heights	Chesterfield County	VA	23834-
Columbia	Cumberland County	VA	23038-
Courtland	Southampton County	VA	23837-
Courtland	Southampton County	VA	23837-2034
COURTLAND	Southampton County	VA	23837-2034
COVINGTON	Covington city City	VA	24426-
Covington	Covington city City	VA	24426-0950
DANVILLE	PITTSYLVANIA	VA	24540-
Elkton	Rockingham County	VA	22827-
FRONT ROYAL		VA	22630-
HOPEWELL	Hopewell city City	VA	23860-
HOPEWELL	Hopewell city City	VA	23860-
HOPEWELL	Hopewell city City	VA	23860-
LYNCHBURG	LYNCHBURG (CITY)	VA	
Lynchburg	LYNCHBURG (CITY)	VA	24501-
MARTINSVILLE		VA	24112-4600
NARROWS	Giles County	VA	24124-
NARROWS	Giles County	VA	24124-1000
NEWPORT NEWS	Newport News city City	VA	23603-
PETERSBURG	PETERSBURG (CITY)	VA	

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3514	110000342861	325510		
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3516	110020677999	325998	4916211	
3517	110000341504	325220	4958111	
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3520	110002469613	325222		
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3522	110000869766	326113	4783611	
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3527	110008225152	71393		
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3532	110000490816	325199	4783711	
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3552	110000419609	325199	7049111	
3553	110027215671	325199	12690411	
3554	110000419627	325998	4953511	

U S Amines (Portsmouth) L L C
US ARMY - RAAP
Wako Chemicals USA Inc
DUPONT TEIJIN FILMS
DUPONT TEIJIN FILMS
DUPONT SPRUANCE PLANT
Akzo Nobel Coatings
DYNAX AMERICA CORP USA
BASF Corporation - Suffolk
Invista - Waynesboro
Degesch America Inc
BASF CORP
MANN INDUSTRIES INC
KINGSPAN INSULATION LLC
OSULLIVAN FILMS INC
PLAINS MARKETING LP YORKTOWN
HOVENSA/ LIMETREE BAY TERMINALS
CHEMTRADE
Linde Gas North America
Cap Sante Marine Fueling Dock and Boat Hoist
BP WEST COAST PRODUCTS LLC
VERTELLUS PERFORMANCE CHEMICALS LLC
CHEMCO, INC
Little Green LLC
EMERALD KALAMA CHEMICAL LLC
Agrium US Inc
Tessenderlo Kerley Inc
SGL, Automotive Carbon Fibers, LLC
BP Marine Americas Port Angeles Wharf
Framatome Anp Inc
Alaska Marine Lines Dock No 2
FORMULA CORP
US Oil & Refining Co
Port of Vancouver Oil Terminal Dock Berth No 5
Pace International
Aquatic Co
INX INTERNATIONAL INK CO
NEENAH PAPER INC
BOC MERCHANT PRODUCTION INC
AIR PRODUCTS AND CHEMICALS INC
BIG RIVER RESOURCES BOYCEVILLE LLC
Hydrite Chemical Company
DIDION MILLING-CAMBRIA
MULE-HIDE MANUFACTURING CO., INC.
HYDRITE CHEMICAL CO
SANIMAX ENERGY LLC
IKI MANUFACTURING

3230 W. Norfolk Rd.
4050 Peppers Ferry Road
1600 Bellwood Rd
5401 JEFFERSON DAVIS HWY
5401 JEFFERSON DAVIS HWY
5401 JEFFERSON DAVIS HWY
2837 Roanoke Avenue S.W.
568 EAST PARK DRIVE
2301 Wilroy Road
400 Dupont Blvd
153 Triangle Dr.
RTE 60 E
RTE 60 E OF WILLIAMSBURG
172 PACTIV WAY
1944 VALLEY AVE
2201 GOODWIN NECK RD
1 ESTATE HOPE, P.O. BOX 127
8579 N TEXAS RD
8581 S. Texas Road
CAP SANTE WATERWAY
4519 GRANDVIEW RD
4800 STATE RT 12
4191 GRANDVIEW RD
2999 John - Stevens Wy
1296 NW 3RD ST
227515 E Bowles Road
46807 S Piert Rd
8781 Randolph Rd. NE
1720 West Ediz Hook Road
2101 Horn Rapids Rd.
7100 2d Avenue S.W.
7901 2ND AVE. S.
3001 Marshall Ave
5701 NW LOWER RIVER RD
5661 Branch Road
801 Northern Pacific
3100 W Wisconsin Ave
600 S VULCAN ST
4220 S Walters Rd
N 10189 370th St
N10185 370th St
300 N PATRICK BLVD
501 S Williams St
50 BRIDGE ST
114 N Main St
605 Bassett St
107 Maple Ct

Portsmouth	Portsmouth city City	VA	23703-
RADFORD	Montgomery County	VA	24141-0100
Richmond	Chesterfield County	VA	23237-1326
RICHMOND	Chesterfield County	VA	23234-
RICHMOND	Chesterfield County	VA	23234-
RICHMOND	Chesterfield County	VA	23234-
Roanoke		VA	24015-
ROANOKE		VA	24019-
Suffolk	Suffolk city City	VA	23434-
Waynesboro	Waynesboro city City	VA	22980-
Weyers Cave	Augusta County	VA	24486-
WILLIAMSBURG	James City County	VA	23185-
LEE HALL	James City County	VA	23603-
WINCHESTER	Winchester city City	VA	
WINCHESTER	Winchester city City	VA	22604-
YORKTOWN		VA	
ST. CROIX ISLAND		VI	
Anacortes	Skagit County	WA	98221-8603
Anacortes	Skagit County	WA	98221-
Anacortes	Skagit County	WA	98221-
BLAINE	Whatcom County	WA	98230-9640
ELMA	Grays Harbor County	WA	98541-
FERNDALE	Whatcom County	WA	98248-
Hoquiam	Grays Harbor County	WA	98550-
KALAMA	Cowlitz County	WA	98625-9799
Kennewick	Benton County	WA	99337-
Kennewick	Benton County	WA	99337-
Moses Lake	Grant County	WA	98837-
Port Angeles		WA	98362-
Richland	Benton County	WA	99352-
Seattle	KING	WA	98106-
SEATTLE	KING	WA	98108-
Tacoma	Pierce County	WA	98421-
Vancouver	CLARK	WA	98660-
Wapato		WA	98951-
Yelm	Thurston County	WA	98597-
Appleton	Outagamie County	WI	54914-1705
APPLETON	Outagamie County	WI	
Beloit	Rock County	WI	53511-8885
Boyceville	Dunn County	WI	54725-
Boyceville	Dunn County	WI	54725-5122
Brookfield	WAUKESHA	WI	53045-
Cambria	Columbia County	WI	53923-9109
CORNELL		WI	
Cottage Grove	Dane County	WI	53527-9701
De Forest	Dane County	WI	53532-1203
Edgerton	Rock County	WI	53534-1157

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37.450930	-77.434150
37.450930	-77.434150
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43.077700	-89.197600
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3556	110058297506	325314	15582211	
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3558	110000420928	326199		NEIWI4430055
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3562	110005518715	325910	12690711	
3563	110002038946	323111	7556611	NEIWI2682707
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3566	110022448476	325611	6479611	
3567	110000419789	325193	6886411	
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3594	110033182357	325193	14991611	
3595	110000858956	325510	4946911	
3596	110000422105	325612	6877811	
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3599	110000594205	325194	7078711	
3600	110000416746	325211	6153911	
3601	110000416844	325510	8041411	

UNITED WISCONSIN GRAIN PRODUCERS, LLC
HYPONEX CORP
CAMBRIDGE MAJOR LABORATORIES
Wausaukee, Inc.
CARBOLINE CO
SCHWABE NORTH AMERICA INC
Calwis Co Inc
CHEMICAL RESEARCH AND TECHNOLOGY
MIDWEST COMPOSITE TECHNOLOGIES INC
OMNOVA SOLUTIONS INC
Twin State Inc
EVONIK CORP
VALERO REWNEWABLE FUELS COMPANY LLC
Isola Laminates Inc
UNLIMITED RENEWABLES LLC
QUAD/GRAPHICS INC - LOMIRA
POLYONE DESIGNED STRUCTURES AND SOLUTIONS
TYCO FIRE PRODUCTS LP
CHEMDESIGN PRODUCTS, INC.
SUN CHEMICAL CORPORATION
QUEST SPECIALTY COATINGS LLC
ESSENTIAL INDS INC
UNITED ETHANOL LLC
AIR PRODUCTS PERFORMANCE MFG INC
ST. LUKE'S MEDICAL CENTER
Ashland Hercules Water Technologies
ALDRICH CHEMICAL COMPANY LLC
Hentzen Coatings, Incorporated
Bell Aromatics
ATHEA LABS INC
BADGER STATE ETHANOL INC
MARQUIS ENERGY - WISCONSIN LLC
NORTH AMERICAN BIOINDUSTRIES CORP
PPG INDUSTRIES
PPG INDUSTRIES
CRUISERS PLANT 2, DIV OF KSC INT. INC.
CRUISERS PLANT 1, DIV OF KSC INT. INC.
A. P. NONWEILER CO., INC.
FOX RIVER VALLEY ETHANOL LLC
FOX RIVER VALLEY ETHANOL LLC - PICKETT
RUST - OLEUM CORP
Online Packaging Inc
ENCAPSYS LLC
3M PRAIRIE DU CHIEN BUILDING 50
LIGNOTECH USA INC
Cook Composites and Polymers
SHEBOYGAN PAINT CO.

W1231 TESSMANN RD
9899 Wausaukee Rd
W130 N10497 Washington Drive
431 EAST MAIN
614 Elizabeth St
825 Challenger Dr
901 Hinkle St.
1951 Constitution Ave
535 NORTON DR
1701 Cornell Rd
3631 Polzin Rd.
900 S Palm St
W5289 Valero Way
1300 NORPLEX DR
N5505 Crossman Rd
N11896 STATE ROAD 175
2917 Division St
1 Stanton St
2 STANTON ST
450 MILWAUKEE ST
N92 W14701 Anthony Ave
28391 ESSENTIAL RD.
1250 Chicago St
337 Vincent St
2900 W OKLAHOMA AVE
5228 N HOPKINS ST
6000 N Teutonia Ave
6937 W MILL RD
708-10 W NATIONAL AVE
7855 N. FAULKNER RD.
820 W 17th St
N9585 State Road 80
3068 S. CALHOUN RD.
10800 S 13th St
10800 S 13TH ST, PO Box 28
205 CHARLES ST
804 PECOR ST
3321 North Shore Dr
4995 State Road 91
6574 State Road 44
8105 95th St
4311 Plover Rd.
2500 W Wisconsin St
801 N MARQUETTE RD
100 Grand Ave
340 South Railroad Street
1439 N 25TH ST

FRIESLAND	Columbia County	WI	53923-9510
Germantown	Washington County	WI	53022-
Germantown	Washington County	WI	53022-
GILLETT		WI	54124-
Green Bay	Brown County	WI	54302-1813
Green Bay	Brown County	WI	54311-8328
Green Bay	Brown County	WI	54303-
Hartford	Washington County	WI	53027-8406
HARTLAND	Waukesha County	WI	53029-
Howard	Brown County	WI	54313-8934
Janesville	Rock County	WI	53545-
Janesville	Rock County	WI	53548-5080
Johnson Creek	Jefferson County	WI	53038-9793
LA CROSSE		WI	54601-
Lake Mills	Jefferson County	WI	53551-9653
LOMIRA	Dodge County	WI	53048-
Manitowoc	Manitowoc County	WI	54220-5948
Marinette	Marinette County	WI	54143-2542
MARINETTE	Marinette County	WI	54143-2543
MENASHA		WI	54952-
Menomonee Falls	Waukesha County	WI	53051-
MERTON		WI	53056-
Milton	Rock County	WI	53563-1844
Milton	Rock County	WI	53563-1146
MILWAUKEE	Milwaukee County	WI	53215-
MILWAUKEE	Milwaukee County	WI	53209-4634
Milwaukee	Milwaukee County	WI	53209-3645
Milwaukee	Milwaukee County	WI	53218-
Milwaukee	Milwaukee County	WI	53204-
MILWAUKEE	Milwaukee County	WI	53224-
Monroe	Green County	WI	53566-2393
Necedah	Juneau County	WI	54646-7844
NEW BERLIN		WI	53151-
Oak Creek	Milwaukee County	WI	53154-6800
OAK CREEK	Milwaukee County	WI	53154-6800
OCONTO	Oconto County	WI	54153-
OCONTO	Oconto County	WI	54153-
OSHKOSH	WINNEBAGO	WI	54901-
Oshkosh	Winnebago County	WI	54904-9416
Pickett	Winnebago County	WI	54964-9638
Pleasant Prairie	Kenosha County	WI	53158-2224
Plover	Portage County	WI	54467-3531
Portage	Columbia County	WI	53901-1023
PRAIRIE DU CHIEN		WI	53821-
Rothschild	Marathon County	WI	54474-1100
Saukville	Ozaukee County	WI	53080-
SHEBOYGAN	Sheboygan County	WI	53081-3107

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Hexion Specialty Chemicals Inc.
SACO POLYMERS INC
ALDRICH CHEMICAL COMPANY
SPARTA PREFINISH
ACE ETHANOL LLC
S C JOHNSON & SON INC
SPECIALTY MINERALS INC
Harley Davidson Motor Company-Tomahawk Somo Facility
COATING PLACE INC
SCIENTIFIC PROTEIN LABS
KOLBE & KOLBE MILLWORK CO INC
SPECIALTY MINERALS INC
M & G POLYMERS USA, LLC, APPLE GROVE
THE CHEMOURS COMPANY FC, LLC, BELLE
KINGSFORD MANUFACTURING COMPANY - Beryl
JELD-WEN, INC. DBA JELD-WEN, CRAIGSVILLE
KOPPERS INC., FOLLANSBEE
MPM SILICONES, LLC, FRIENDLY
Akzo Nobel
XSYS PRINT SOLUTIONS US LLC
UNION CARBIDE CORPORATION-INSTITUTE
BAYER CROPSCIENCE LP, INSTITUTE
PPG Industries
Ashland Chemical Neal
Marathon Petroleum - Neal Propane Cavern
Marathon Petroleum - Butane Cavern
BRASKEM AMERICA NEAL PLANT
MARATHON ASHLAND PETROLEUM LLC
MARATHON ASHLAND PETROLEUM LLC
ECOLAB INC
Mylan Pharmaceuticals Inc. - Chestnut Ridge Road Facility
BAYER MATERIALSCIENCE - New Martinsville
FLEXSYS AMERICA L P
GREAT LAKES CHEMICAL CORP. (Formerly FMC)
DuPont
KINGSFORD MANUFACTURING COMPANY - Parsons
EAGLE NATRIUM LLC, NATRIUM / Axiall Corporation, Natrium Plant
UNION CARBIDE CORPORATION, SOUTH CHARLESTON
BAYER MATERIALSCIENCE - SOUTH CHARLESTON
Clearon Corp. - South Charleston Plant
UNION CARBIDE CORPORATION, TECHNOLOGY PARK
ST. MARYS REFINING COMPANY
Joe S Towing Co Dock
E. I. DU PONT DE NEMOURS AND COMPANY, WASHINGTON
KURARAY AMERICA, INC., WASHINGTON
THE CHEMOURS COMPANY FC, LLC, WASHINGTON WORKS
SABIC INNOVATIVE PLASTICS US LLC, WASHINGTON

2522 S 24TH ST
3220 Crocker Ave
5485 COUNTY ROAD V
1155 Maple Ave
815 W Maple St
8311 16th St
1 Water St
426 E Somo Avenue
200 PAOLI ST BOX 930310
700 E Main St
1323 S 11TH AVE
1120 5th Ave N
STATE ROUTE 2
901 W. DUPONT AVENUE
ROUTE 46
500 JELD-WEN ROAD
100 KOPPERS ROAD
10851 ENERGY HIGHWAY
11636 HUNTINGTON RD
2401 5TH AVE
ROUTE 25
RTE 25 & I 64
STATE ROUTE 2 NORTH
100 BIG SANDY RIVER ROAD
100 Big Sandy River Road
150 Big Sandy River Rd.
200 BIG SANDY RIVER ROAD
23RD STREET AT RIVER
23RD STREET AT RIVER
942 BAKER RD.
781 CHESTNUT RIDGE ROAD
STATE ROUTE 2
1 MONSANTO ROAD
200 PICKENS ROAD
8480 Dupont Rd
ROUTE 219 SOUTH
15696 ENERGY ROAD
437 MACCORKLE AVE, SW
437 MACCORKLE AVE.,SW
95 MACCORKLE AVENUE, SW
TECHNOLOGY PARK OPERATIONS
201 BARKWILL STREET
229 Neale Rd
8480 DUPONT ROAD
8480 DUPONT ROAD
8480 DUPONT ROAD
9226 DUPONT ROAD

SHEBOYGAN	Sheboygan County	WI	53081-5554
Sheboygan	Sheboygan County	WI	53081-6434
SHEBOYGAN FALLS	Sheboygan County	WI	53085-2839
Sparta	Monroe County	WI	54656-2380
Stanley	Chippewa County	WI	54768-1085
Sturtevant	Racine County	WI	53177-1974
Superior	Douglas County	WI	54880-1376
Tomahawk	Lincoln County	WI	54487-
VERONA	Dane County	WI	53593-8702
Waunakee	Dane County	WI	53597-1440
WAUSAU	Marathon County	WI	54401-
Wisconsin Rapids	Wood County	WI	54495-1900
APPLE GROVE	Mason County	WV	25502-
BELLE	Kanawha County	WV	25015-
BERYL	Mineral County	WV	26726-
CRAGSVILLE	NICHOLAS	WV	26205-
FOLLANSBEE	Brooke County	WV	26037-0665
FRIENDLY	Tyler County	WV	26146-7511
Gallipolis Ferry	Mason County	WV	25515-
Huntington	Cabell County	WV	25703-
INSTITUTE	Kanawha County	WV	25112-
INSTITUTE	Kanawha County	WV	25112-
NEW MARTINSVILLE	Marshall County	WV	26155-
Kenova	Wayne County	WV	25530-
Kenova	Wayne County	WV	25530-
Kenova	Wayne County	WV	25530-
KENOVA	Wayne County	WV	25530-
Kenova	Wayne County	WV	25530-
Kenova	Wayne County	WV	25530-
MARTINSBURG	BERKELEY	WV	25405-
MORGANTOWN	Monongalia County	WV	26505-
NEW MARTINSVILLE	Marshall County	WV	26155-
NITRO	PUTNAM	WV	25143-
Nitro	PUTNAM	WV	25143-
Washington	Wood County	WV	26101-
PARSONS	Tucker County	WV	26287-
PROCTOR	Marshall County	WV	26055-
SOUTH CHARLESTON	Kanawha County	WV	25303-
SOUTH CHARLESTON	Kanawha County	WV	25303-
SOUTH CHARLESTON	Kanawha County	WV	25303-1411
SOUTH CHARLESTON	Kanawha County	WV	25303-
ST. MARYS		WV	26170-
Parkersburg	Wood County	WV	26105-
WASHINGTON	Wood County	WV	26181-
WASHINGTON	Wood County	WV	26181-
WASHINGTON	Wood County	WV	26181-
WASHINGTON	Wood County	WV	26181-

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43.722100	-87.749500
43.673810	-87.780850
43.937360	-90.826090
44.958900	-90.960310
42.706000	-87.882900
46.730020	-92.078380
45.472020	-89.723420
42.978810	-89.542040
43.187900	-89.440200
44.943310	-89.649020
44.404700	-89.826700
38.664483	-82.169733
38.241944	-81.552500
39.477220	-79.066400
38.343350	-80.660270
40.338410	-80.606852
39.483459	-81.098483
38.772220	-82.205560
38.424170	-82.415410
38.386380	-81.779720
38.383113	-81.777205
39.747206	-80.851833
38.367466	-82.592883
38.366970	-82.594670
38.362120	-82.595570
38.355550	-82.595270
38.403280	-82.591110
38.403280	-82.591110
39.415180	-77.900480
39.659170	-79.958300
39.726110	-80.829720
38.437342	-81.843657
38.435238	-81.846532
39.269440	-81.670000
39.077500	-79.693610
39.747810	-80.849240
38.369300	-81.683100
38.370000	-81.683330
38.367220	-81.706110
38.354466	-81.707200
39.386710	-81.206603
39.350830	-81.539710
39.269440	-81.670000
39.265115	-81.667228
39.271944	-81.661667
39.260167	-81.678893

3648	110000344789	325411	6776511	
3649	110000344850	325199	6153211	
3650	110061078266	325998	16886411	
3651	110010413427	486110	6811011	
3652	110040906945	324110	6512311	
3653	110045433483	486110		
3654	110000468048	324110	4787811	
3655	110000468066	212399	7001211	
3656	110007346942	211111	4208211	
3657	110054893399	211111		
3658	110005580503	327310		
3659	110015765215	486110		
3660	110000468093	324110		
3661	110000600369	325312	4956711	
3662	110007901529	486110	6940011	
3663				
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3672				
3673	110002432779	325211 325411 325520 325199		
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3688				
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3690	110054287721	493190	13809511	
3691	110056961480	211112 325199		
3692	110017787242	212393 325199		
3693	110056955460	221112 325120	8148711	
3694	110013691095	311119 325314		

Alpharma Inc / Zoetis LLC
CYTEC INDUSTRIES, INC., WILLOW ISLAND
ALLNEX USA INC., WILLOW ISLAND
Byron Station
Sinclair Refinery
SINCLAIR TRANS CO_BAIROIL STATION
FRONTIER REFINERY (HOLLYFRONTIER CHEYENNE REFINING LLC)
DYNO NOBEL - MTBE
ANSCHUTZ RANCH EAST (MERIT ENERGY COMPANY)
MERIT ENERGY WHITNEY CANYON
LARAMIE CEMENT PLANT (MOUNTAIN CEMENT COMPANY)
DONKEY CREEK STATION (BELLE FOURCHE PIPELINE)
SINCLAIR REFINERY (SINCLAIR WYOMING REFINING CO)
Rock Springs Fertilizer Complex
Granger Station
Amoco
Amvac Chemical Corporation
Bayer
Calgene Chemical
Clowhite
Condea Vista
Con-Lux Coatings
Exxon Chemical Americas
General Formulations
Great Lakes
Hickson DanChem Corporation
Kelly-Moore Paint Company, Incorporated
Manus Products
Metaglo
Miracle Adhesives
Mydrin
Porce-Len, Incorporated
Procter & Gamble
Procter & Gamble
Quality Coatings
Siegwerk
Sigma Chemical Company
Sika Corporation
Sunbelt Chemicals
TACC
Union Camp
Wright Corporation
CEPHEID Warehouse
ENTERPRISE PRODUCTS OPERATING LLC
THE DOW CHEMICAL CO GRAND BAYOU OPERATIONS
AES SHADY POINT LLC
BEHRENDS FEED & FERTILIZER LP

1 Duggar Dr.
1 Heilman Avenue
252 HEILMAN AVENUE
Section 23, T56N, R97W
21,21N,86W
S7 T26N R89W
2700 EAST 5TH STREET
8305 OTTO ROAD
17 MI S OF EVANSTON
20 MI NNE EVANSTON
SE1/4 S17 T15N R73W
6 MI SW OF MOORCROFT
100 EAST LINCOLN HIGHWAY
515 WY-430
5,18N,111W
1975 Old Richmond Rd
918 CARIBBEAN DRIVE
10207 FM 1942
LOUISIANA HWY 70
3 MILES E OF JUNCTION 31
3599 RANCH RD 1376

Willow Island	Pleasants County	WV	26134-9700
WILLOW ISLAND	Pleasants County	WV	26134-9801
WILLOW ISLAND	Pleasants County	WV	26134-
Big Horn County	Big Horn County	WY	82410-
Carbon	Carbon County	WY	82301-
CARBON COUNTY	Carbon County	WY	
CHEYENNE	Laramie County	WY	82007-
CHEYENNE	Laramie County	WY	82001-
EVANSTON	Uinta County	WY	82930-
EVANSTON	Uinta County	WY	
LARAMIE		WY	
MOORCROFT		WY	
SINCLAIR		WY	
Rock Springs	Sweetwater County	WY	82935-
Sweetwater	Sweetwater County	WY	82935-
Danville	PITTSYLVANIA	VA	24540-
SUNNYVALE	BAY AREA AQMD	CA	94089-
MONT BELVIEU	CHAMBERS	TX	77580-
PAINCOURTVILLE	ASSUMPTION PARISH	LA	70391-
PANAMA	LE FLORE	OK	74951-
FREDERICKSBURG	GILLESPIE	TX	78624-

39.353610	-81.312500
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35.1929	-94.6469
30.18744	-98.76866

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3696	110000415168	311221 325193	7891211	
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3698	110022811046	311613 325199 311119	5354011	
3699	110005746773	311613 311999 325199	2943911	
3700	110000320386	311942 311930 311920 325411	7527011	
3701	110000445073	312140 311221 325193 311211	8066311	
3702	110007658267	313110 325211		
3703	110000316836	313320 325510 322220		
3704	110000917018	313320 325991		
3705	110025331111	313320 325991		
3706	110010457399	313320 325991	537311	
3707	110014397777	314110 325998		
3708	110008055558	321219 325510		
3709	110000487599	322220 325211	8418211	
3710	110000324113	322220 325520	7942111	
3711	110000495090	323111 332813 325910	4917011	
3712	110000452297	323111 323113 493110		
3713	110000464140	324110 325110	7909511	
3714	110000486304	324110 325180	1818411	
3715	110000357159	324122 325520		
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3717	110011777274	324191 325611		
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3719	110000407186	324191 325998	6178411	
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3721	110000367175	324199 325180		
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3739	110000362492	325120		
3740	110000378412	325120		
3741	110000454525	325120		
3742	110000490120	325120		

ADM DECATUR COMPLEX
PENFORD PRODUCTS CO LLC
ROQUETTE AMERICA INC
GRIFFIN INDUSTRIES LLC
GELITA
NATUREX INC
MGPI PROCESSING INC
COATS NA HENDERSONVILLE PLANT
VON ROLL USA INC NEW HAVEN
ROHM & HAAS ELECTRONIC MATERIALS CMP INC-B5 B6
ROHM & HAAS ELECTRONIC MATERIALS CMP INC B7 B15
ROHM & HAAS ELECTRONIC MATERIALS CMP INC B2 B3 B8
PREMIER POLYMERS
JELD-WEN
ARCLIN SURFACES LLC
ADCHEM CORP
US BUREAU OF ENGRAVING & PRINTING WESTERN CURRENCY FACILIT
AMERICAN GREETINGS
LNVA-NORTH REGIONAL TREATMENT PLANT
CHEVRON PRODUCTS CO-HAWAII REFINERY
HENKEL CORP
ROCKY MOUNTAIN PETROLEUM CORP
RICHARDSAPEX INC
OMNI SPECIALITY PACKAGING INC
QUAKER CHEMICAL CORP (2)
KINPAK INC
MERICHEM CO
ENTERPRISE PRODUCTS OPERATING LLC
CHEMTOOL INC
NALCO CO
HUNTSMAN INTERNATIONAL LLC
JX NIPPON CHEMICAL TEXAS INC
NALCO COMPANY-ODESSA PLANT
CHEMTOOL ROCKTON NORTH PLANT
SASOL CHEMICALS (USA) LLC
NALCO CO
NALCO CO
ROHM & HAAS TEXAS INC
SHELL CHEMICAL LP
COS-MAR CO
CARBIDE INDUSTRIES LLC CALVERT CITY
AIR LIQUIDE ADVANCED MATERIALS INC
AIR LIQUIDE ADVANCED MATERIALS INC
NITROUS OXIDE CORP
LOUISVILLE PACKAGING
AIR PRODUCTS & CHEMICALS INC CATOOSA SITE
PRAXAIR INC

4666 FARIES PKWY E
1001 FIRST ST SW
1003 S 5TH ST
1176 BRYAN GRIFFIN RD
2445 PORT NEAL IND US TRIAL RD
375 HUYLER ST
1300 MAIN ST
1710 BREVARD RD
166 CHAPEL ST
351 BELLEVUE RD
50 BELLEVUE RD
451 BELLEVUE RD
234 LOWY DR
600 JELD-WEN RD
2301 N COLUMBIA BLVD
1852 OLD COUNTRY RD
9000 BLUE MOUND RD
1400 OHLENDORF RD
2655 GULF STATES RD
91-480 MALAKOLE ST
1600 EXECUTIVE DR
9155 BOSTON ST
4202-24 MAIN ST
10399 HWY 1 SOUTH
14301 BIRWOOD AVE
2780 GUNTER PARK DR
2701 WARRIOR RD
2220 N RIVER RD
8200 RIDGEFIELD RD
2660 AMERICAN WAY
101 CONCRETE ST
10500 BAY AREA BLVD
115 PROCTOR
1165 PRAIRIE HILL RD
HWY 124 & ROLLINS RD
3901 TERRY ST
3599 HIGHWAY 44
1900 TIDAL ROAD
5900 HWY 225 EAST
6325 LA HWY 75
3204 INDUSTRIAL PKWY
197 MEISTER AVE
1310 S MAIN ST
650 CHEMSTRAND RD
7745 NATIONAL TURNPIKE
1115 KEYSTONE AVE
4466 ALDERGROVE RD

DECATUR	MACON	IL	62526-
CEDAR RAPIDS	LINN	IA	52404-
KEOKUK	LEE	IA	52632-
BUTLER	PENDLETON	KY	41006-
SERGEANT BLUFF	WOODBURY	IA	51054-
SOUTH HACKENSACK	BERGEN	NJ	07606-
ATCHISON	ATCHISON	KS	66002-
HENDERSONVILLE	HENDERSON	NC	28791-
NEW HAVEN	NEW HAVEN	CT	06513-
NEWARK	NEW CASTLE	DE	19713-
NEWARK	NEW CASTLE	DE	19713-
NEWARK	NEW CASTLE	DE	19713-
CHATSWORTH	MURRAY	GA	30705-
CRAIGSVILLE	NICHOLAS	WV	26205-
PORTLAND	MULTNOMAH	OR	97217-
RIVERHEAD	SUFFOLK	NY	11901-
FORT WORTH	TARRANT	TX	76131-
OSCEOLA	MISSISSIPPI	AR	72370-
BEAUMONT	JEFFERSON	TX	77701-
KAPOLEI	HONOLULU	HI	96707-
LAGRANGE	TROUP	GA	30240-
HENDERSON	ADAMS	CO	80640-
PHILADELPHIA	PHILADELPHIA	PA	19127-
SHREVEPORT	CADDO	LA	71115-
DETROIT	WAYNE	MI	48238-
MONTGOMERY	MONTGOMERY	AL	36109-
TUSCALOOSA	TUSCALOOSA	AL	35404-
PORT ALLEN	WEST BATON ROUGE	LA	70767-
CRYSTAL LAKE	MCHENRY	IL	60012-
PORT ALLEN	WEST BATON ROUGE	LA	70767-
HOUSTON	HARRIS	TX	77012-
PASADENA	HARRIS	TX	77507-
ODESSA	ECTOR	TX	79762-
ROCKTON	WINNEBAGO	IL	61072-
WINNIE	JEFFERSON	TX	77665-
TEXARKANA	BOWIE	TX	75501-
GARYVILLE	ST JOHN THE BAPTIST PARIS	LA	70051-
DEER PARK	HARRIS	TX	77536-
DEER PARK	HARRIS	TX	77536-
CARVILLE	IBERVILLE	LA	70721-
CALVERT CITY	MARSHALL	KY	42029-
BRANCHBURG	SOMERSET	NJ	08876-
HIGH SPRINGS	ALACHUA	FL	32643-
CANTONMENT	ESCAMBIA	FL	32533-
LOUISVILLE	JEFFERSON	KY	40214-
CATOOSA	ROGERS	OK	74015-
FERNDALE	WHATCOM	WA	98248-

39.867604	-88.887346
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39.64923	-75.74434
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32.371545	-93.651844
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32.39896	-86.23036
33.24565	-87.47948
30.480556	-91.202778
42.26195	-88.35319
30.41898	-91.23679
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29.710967	-95.119144
30.218908	-91.066327
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29.816521	-82.604432
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48.878567	-122.723731

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3762	110054838459	325120		
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3765	110056639106	325120		
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3777	110000872075	325130 334519 325998		
3778	110000604490	325130 325199		
3779	110000323392	325130 325613		
3780	110000410564	325130 325991		
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3786	110000386029	325130		
3787	110000390693	325130		
3788	110000393556	325130		
3789	110000393609	325130		
3790	110000402920	325130		

AIR LIQUIDE ELECTRONICS US LP
AIRGAS USA LLC MIAMIVILLE
LINDE GAS NA LLC
AIRGAS USA LLC - ANKENY IA
LINDE GAS NA LLC MEDFORD
ICOR INTERNATIONAL INC
AIR LIQUIDE INDUSTRIAL US LP
HUDSON TECHNOLOGIES CO
A-GAS AMERICAS
AIR LIQUIDE WASHINGTON CO2 PLANT
AIR LIQUIDE INDUSTRIAL US LP
PRAXAIR INC PORT ARTHUR HYDROGEN FACILITY 497
AIR LIQUIDE LARGE INDUSTRIES US LP - EL SEGUNDO
HUDSON TECHNOLOGIES CO
AIR PRODUCTS & CHEMICALS INC - GARYVILLE SMR
CHEMOURS EL DORADO
AIR LIQUIDE LARGE INDUSTRIES US LP - RODEO HYDROGEN PLANT
AIRGAS CARBONIC INC
AIR LIQUIDE LARGE INDUSTRIES US LP - SMR UNIT
AIR PRODUCTS & CHEMICALS INC/DETROIT HYDROGEN FACILITY
AIR PRODUCTS & CHEMICALS INC LULING SMR
A-GAS AMERICAS
MATHESON TRI-GAS-NEW JOHNSONVILLE TN BRANCH
AIR LIQUIDE - LONGVIEW POX
AIR LIQUIDE FREEPORT HPU PLANT
PRAXAIR PORT ARTHUR 2
DIVERSIFIED PURE CHEM LLC
AIR PRODUCTS & CHEMICALS INC MARTINEZ SOLANO WAY
AIRGAS DRY ICE
AIRGAS DRY ICE
DUPONT LOUISVILLE PLANT
RAPREC REFRIGERANTS INC
ABBEY COLOR INC
BRAIN POWER INC
ARCHROMA US INC
JOSH LOWENSTEIN & SONS INC
UNIFORM COLOR CO
THE SHEPHERD COLOR CO
ORGANIC DYES & PIGMENTS LLC
COLORCON
ORIENT CORP OF AMERICA
MASON COLOR WORKS INC
DAY-GLO COLOR CORP
FERRO CORP
SUN CHEMICAL CORP COLOR INTERMEDIATES
SUN CHEMICAL CORP
HOLLAND COLOURS AMERICAS INC

19 STEEL RD W
160 ST RT 126
3930 MICHIGAN ST
410 SE CREEKVIEW RD
470 W ANTELOPE RD
10640 E 59 TH ST
A LINE RD
3402 N MATTIS AVE
1100 HASKINS RD
1285 SOUTH 300 WEST
815 S MCHENRY ST
2555 SAVANNAH AVE
1310 E EL SEGUNDO BLVD
1360 FOSTER AVE
4663 WEST AIRLINE HWY. (WITHIN MARATHON PETROLEUM
322 SOUTHFIELD CUTOFF RD
1391 SAN PABLO AVENUE
7031 SILBERHORN HWY
11777 BAY AREA BLVD.
1025 OAKWOOD BLVD
12501 B RIVER RD
30045 FM 2978 RD
1700 SCEPTER RD
2292 CALLAHAN RD
FM 523 OYSTER CREEK DIVISION OC-409 (GATE 9)
1801 S GULFWAY DR
11050 S HWY 287
SOLANO WAY TRACK 1 D STREET GATE
2535 DEL AMO BLVD
731 W CUTTING BLVD
4250 CAMP GROUND RD
8932 W CACTUS RD
400 E TIOGA ST
4470 SW 74TH AVE
788 CHERT QUARRY RD
420 MORGAN AVE
942 BROOKS AVE
4539 DUES DR
65-84 VALLEY ST
415 MOYER BLVD
111 PARK AVE
250 E 2ND ST
1570 E HIGHLAND RD
1560 N MAIN ST
5366 ESTE AVE
4526 CHICKERING AVE
1501 PROGRESS DR

MORRISVILLE	BUCKS	PA	19067-
MIAMIVILLE	CLERMONT	OH	45147-
HAMMOND	LAKE	IN	46323-
ANKENY	POLK	IA	50021-
WHITE CITY	JACKSON	OR	97503-
INDIANAPOLIS	MARION	IN	46236-
GIBBSTOWN	GLOUCESTER	NJ	08027-
CHAMPAIGN	CHAMPAIGN	IL	61821-
BOWLING GREEN	WOOD	OH	43402-
WASHINGTON	DAVIESS	IN	47501-
BURLINGTON	RACINE	WI	53105-
PORT ARTHUR	JEFFERSON	TX	77640-
EL SEGUNDO	LOS ANGELES	CA	90245-
NASHVILLE	DAVIDSON	TN	37210-
GARYVILLE	ST JOHN THE BAPTIST	LA	70051-
EL DORADO	UNION	AR	71730-
RODEO	CONTRA COSTA	CA	94572-
BLISSFIELD	LENAWEE	MI	49228-
PASADENA	HARRIS	TX	77507-
DETROIT	WAYNE	MI	48217-
LULING	ST CHARLES PARISH	LA	70070-
SPRING	MONTGOMERY	TX	77354-
WAVERLY	HUMPHREYS	TN	37185-
LONGVIEW	HARRISON	TX	75603-
FREEPORT	BRAZORIA	TX	77541-
PORT ARTHUR	JEFFERSON	TX	77640-
RHOME	WISE	TX	76078-
MARTINEZ	CONTRA COSTA	CA	94553-
TORRANCE	LOS ANGELES	CA	90503-
RICHMOND	CONTRA COSTA	CA	94804-
LOUISVILLE	JEFFERSON	KY	40216-
PEORIA	MARICOPA	AZ	85381-
PHILADELPHIA	PHILADELPHIA	PA	19134-
MIAMI	MIAMI-DADE	FL	33155-
MARTIN	ALLENDALE	SC	29836-
BROOKLYN	KINGS	NY	11222-
HOLLAND	ALLEGAN	MI	49423-
CINCINNATI	BUTLER	OH	45246-
EAST PROVIDENCE	PROVIDENCE	RI	02914-
WEST POINT	MONTGOMERY	PA	19486-
SEAFORD	SUSSEX	DE	19973-
EAST LIVERPOOL	COLUMBIANA	OH	43920-
TWINSBURG	SUMMIT	OH	44087-
ORRVILLE	WAYNE	OH	44667-
CINCINNATI	HAMILTON	OH	45232-
CINCINNATI	HAMILTON	OH	45232-
RICHMOND	WAYNE	IN	47374-

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39.215278	-84.310526
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41.39132	-83.67208
38.63893	-87.222132
42.66343	-88.28578
29.884818	-93.965355
33.905833	-118.401944
36.1259	-86.74233
30.075832	-90.624885
33.11	-92.675
NA	NA
41.819039	-83.845065
29.6255	-95.04503
42.28689	-83.15642
29.921746	-90.350852
30.18755	-95.5932
36.073056	-87.919444
32.4478	-94.6875
28.950047	-95.2909
29.89028	-93.9368
33.034602	-97.45235
38.026667	-122.067222
33.84718	-118.332562
37.92613	-122.37627
38.211676	-85.840572
33.59539	-112.25148
40.00236	-75.12179
25.72814	-80.31488
33.07165	-81.47648
40.71878	-73.93724
42.76395	-86.0835
39.31161	-84.473
41.820317	-71.382255
40.206329	-75.296104
38.66031	-75.6263
40.61563	-80.575857
41.296111	-81.468333
40.86012	-81.76366
39.18359	-84.50318
39.172069	-84.510241
39.85156	-84.92238

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3792	110000418389	325130		
3793	110000419280	325130		
3794	110000473434	325130		
3795	110000480943	325130		
3796	110000807654	325130		
3797	110001088572	325130		
3798	110014815646	325130		
3799	110017062444	325130		
3800	110022919083	325130		
3801	110031002199	325130		
3802	110069239826	325130		
3803	110000745230	325180 336412 811310 332410 331491		
3804	110058937977	325180 325510 325320		
3805	110012266546	325180 334516 325998		
3806	110044931358	325180 423930 331410 331492		
3807	110000470400	325180 424690 424950		
3808	110000308523	325180 212312	7236211	
3809	110000352984	325180 325199		
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3815	110000447767	325180 325314		
3816	110000327361	325180 325998		
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3818	110008124939	325180 325998		
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3820	110042036908	325180 331420		
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3826	110055230799	325180 424690		
3827	110055499465	325180 424690		
3828	110000335085	325180 562211		
3829	110013953702	325180 562211		
3830	110000308499	325180		
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3832	110000312073	325180		
3833	110000316774	325180		
3834	110000318362	325180		
3835	110000319049	325180		
3836	110000322053	325180		
3837	110000327398	325180		

WPC TECHNOLOGIES
DYNAMIC COLOR SOLUTIONS
ALDRICH CHEMICAL CO LLC EMMBER
HUNTSMAN P&A AMERICAS LLC
RYVEC INC
PEARL PLANT
HEUCOTECH LTD
ROYCE ASSOCIATES LP PASSAIC COLOR CHEMICAL CO DIV
BASF CORP NORTH CHARLESTON PLANT
GREENVILLE COLORANTS LLC
KEMIRA CHEMICALS INC
SOLOMON COLORS INC
GE CO
AMERICAN CHEMET CORP
ALLTECH ASSOCIATES INC
5N PLUS WISCONSIN INC
HILL BROTHERS CHEMICAL CO
SPECIALTY MINERALS INC
TOLL SOLUTIONS LLC
AJAY NA LLC
ZACLON LLC
CHEMTRADE REFINERY SERVICES INC
BASF CORP
PMC ORGANOMETALLIX INC
LOVELAND PRODUCTS INC
OCCIDENTAL CHEMICAL CORP NIAGARA PLANT
CHEMTRADE SOLUTIONS LLC
JM HUBER CORP
HONEYWELL ELECTRONIC CHEMICALS LLC
UNIVERTICAL LLC
BETHLEHEM APPARATUS CO INC
UMICORE AUTOCAT USA INC
CAL-CHEM METALS INC
PIONEER AMERICAS LLC(DBA OLIN CHLOR ALKALI PRODUCTS SFS)
PIONEER AMERICAS LLC D/B/A OLIN CHLOR ALKALI PRODUCTS TRACY
BRENNTAG SOUTHWEST INC
BRENNTAG SOUTHWEST INC
AERCCOM INC
AERCCOM INC
HOLLAND CO
HYPERION CATALYSIS INC
WATERS TECHNOLOGY CORP
H KREVIT & CO INC
KUEHNE CHEMICAL CO INC
HUMMEL CROTON INC
MEL CHEMICALS INC
OLIN CORP

300 S BARCLAY
2024 S LENOX ST
230 S EMMBER LN
3700 E OLYMPIC BLVD
251 E PALAIS RD
16 WHITE ST
99 NEWBOLD RD
28-36 PATERSON STREET
7241 INVESTMENT DR
105 WOOD ST
1514 B US HY PARK RD
4050 N COLOR PLANT RD
3901 CASTLE HAYNE RD NC HWY 133
145 HWY 282
17434 MOJAVE ST
6474 BLANCHAR'S CROSSING
4450 N 42ND AVE
260 COLUMBIA ST
310 SPARTANGREEN BLVD
1400 INDUSTRY RD
2981 INDEPENDENCE RD
140 GOES IN LODGE RD
1424 MARS-EVANS CITY RD
13755-B HWY 43 N
56908 HWY 8
4700 BUFFALO AVE
1008 CEDAR LAKE RD
131 COUNTY RD 875
6760 W CHICAGO ST
203 WEATHERHEAD ST
890 FRONT ST
1301 MAIN PKWY
2451 HWY 70 E
11600 PIKE ST
26700 S BANTA RD
4205 HWY 75
1832 HADEN RD
2591 MITCHELL AVE
4317-J FORTUNE PL
153 HOWLAND AVE
38 SMITH PL
177 ROBERT TREAT PAINE DR
67 WELTON ST
84 N HACKENSACK AVE
10 HARMICH RD
500 BARBERTOWN POINT BREEZE RD
2400 BUFFALO AVE

MILWAUKEE	MILWAUKEE	WI	53204-
MILWAUKEE	MILWAUKEE	WI	53207-
MILWAUKEE	MILWAUKEE	WI	53233-
LOS ANGELES	LOS ANGELES	CA	90023-
ANAHEIM	ORANGE	CA	92805-
BUCHANAN	WESTCHESTER	NY	10511-
FAIRLESS HILLS	BUCKS	PA	19030-
PATERSON	PASSAIC	NJ	07501-
NORTH CHARLESTON	CHARLESTON	SC	29418-
GREENVILLE	GREENVILLE	SC	29611-
GOOSE CREEK	BERKELEY	SC	29445-
SPRINGFIELD	SANGAMON	IL	62702-
WILMINGTON	NEW HANOVER	NC	28401-
EAST HELENA	LEWIS AND CLARK	MT	59635-
HESPERIA	SAN BERNARDINO	CA	92345-
WINDSOR	DANE	WI	53598-
PHOENIX	MARICOPA	AZ	85019-
ADAMS	BERKSHIRE	MA	01220-
DUNCAN	SPARTANBURG	SC	29334-
POWDER SPRINGS	COBB	GA	30127-
CLEVELAND	CUYAHOGA	OH	44115-
RIVERTON	FREMONT	WY	82501-
EVANS CITY	BUTLER	PA	16033-
AXIS	MOBILE	AL	36505-
FAIRBURY	JEFFERSON	NE	68352-
NIAGARA FALLS	NIAGARA	NY	14304-
DECATUR	MORGAN	AL	35603-
ETOWAH	MCMINN	TN	37331-
CHANDLER	MARICOPA	AZ	85226-
ANGOLA	STEUBEN	IN	46703-
HELLERTOWN	NORTHAMPTON	PA	18055-
CATOOSA	ROGERS	OK	74015-
GLOBE	GILA	AZ	85501-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
TRACY	SAN JOAQUIN	CA	95304-
SAINT GABRIEL	IBERVILLE PARISH	LA	70776-
HOUSTON	HARRIS	TX	77015-
ALLENTOWN	LEHIGH	PA	18103-
WEST MELBOURNE	BREVARD	FL	32904-
ADAMS	BERKSHIRE	MA	01220-
CAMBRIDGE	MIDDLESEX	MA	02138-
TAUNTON	BRISTOL	MA	02780-
NEW HAVEN	NEW HAVEN	CT	06511-
SOUTH KEARNY	HUDSON	NJ	07032-
SOUTH PLAINFIELD	MIDDLESEX	NJ	07080-
FLEMINGTON	HUNTERDON	NJ	08822-
NIAGARA FALLS	NIAGARA	NY	14303-

43.02786	-87.90965
43.0067	-87.89785
43.030459	-87.930634
34.01884	-118.196
33.81359	-117.90473
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40.18575	-74.79063
40.92286	-74.16814
32.92202	-80.06075
34.85706	-82.43641
32.983095	-79.932757
39.855556	-89.634497
34.32184	-77.92815
46.58534	-111.926268
34.43406	-117.28163
43.205081	-89.33404
33.500556	-112.147778
42.6432	-73.1135
34.919243	-82.095263
33.867778	-84.646444
41.47793	-81.6693
43.0013	-108.41476
40.7462	-80.0369
30.979167	-88.028833
40.1209	-97.1616
43.080567	-79.008163
34.55251	-86.97886
35.28121	-84.53486
33.30034	-111.95932
41.64441	-85.00121
40.58172	-75.34293
36.23267	-95.753571
33.372569	-110.73325
33.957222	-118.075278
37.713333	-121.379444
30.23888	-91.11178
29.76476	-95.178004
40.56748	-75.47848
28.09482	-80.697614
42.65338	-73.11039
42.39152	-71.15083
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3842	110000339189	325180		
3843	110000352109	325180		
3844	110000355277	325180		
3845	110000355348	325180		
3846	110000359308	325180		
3847	110000359488	325180		
3848	110000359736	325180		
3849	110000360608	325180		
3850	110000360877	325180		
3851	110000366032	325180		
3852	110000370223	325180		
3853	110000372230	325180		
3854	110000373177	325180		
3855	110000383335	325180		
3856	110000384931	325180		
3857	110000384995	325180		
3858	110000386216	325180		
3859	110000386822	325180	15484011	
3860	110000386868	325180		
3861	110000390336	325180		
3862	110000393128	325180		
3863	110000397570	325180		
3864	110000405678	325180		
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3866	110000419039	325180	6917311	
3867	110000419262	325180		
3868	110000441219	325180		
3869	110000454464	325180		
3870	110000454990	325180		
3871	110000462687	325180		
3872	110000463944	325180		
3873	110000463962	325180		
3874	110000468663	325180		
3875	110000476958	325180		
3876	110000480541	325180		
3877	110000483860	325180	213711	
3878	110000490870	325180		
3879	110000513659	325180		
3880	110000540175	325180		
3881	110000579008	325180		
3882	110000580924	325180		
3883	110000581549	325180		
3884	110000583100	325180		

FERRO ELECTRONIC MATERIALS
THATCHER CO OF NEW YORK
SPECIALTY CHEMICAL SYSTEMS,INC
KUEHNE CO
HUNTSMAN PIGMENTS & ADDITIVES
GULBRANDSEN CHEMICALS INC
KOPPERS PERFORMANCE CHEMICALS INC
ATOTECH USA
ALLIED UNIVERSAL CORP
CHEMTRADE SOLUTIONS LLC-AUGUSTA PLANT
OLIN CORP
ALLIED UNIVERSAL CORP
ERCO WORLDWIDE INC
UMICORE SPECIALTY CHEMICALS-ARAB
PALM COMMODITIES INTERNATIONAL LLC
NUCLEAR FUEL SERVICES INC
JOHNSON MATTHEY US 2 LLC C/O JOHNSON MATTHEY INC
JONES-HAMILTON CO
BARIUM & CHEMICALS INC
DETREX
UMICORE SPECIALTY MATERIALS RECYCLING
ELCO CORP
GE IVANHOE ROAD PLANT
BAERLOCHER USA
SHEPHERD CHEMICAL CO
CROWN TECHNOLOGY
R J MARSHALL CO
PVS TECHNOLOGIES INC
HYDRITE CHEMICAL CO
MATERION ADVANCED CHEMICALS
JOST CHEMICAL CO INC
ADVANCE RESEARCH CHEMICALS INC
CHEMTRADE REFINERY SERVICES INC
MEMC PASADENA INC
ORION ENGINEERED CARBONS ORANGE PLANT
CHEM32 LLC
BHS MARKETING LLC
HASA INC
GEMINI INDUSTRIES INC
CHEMTRADE WEST US LLC
SOLVAY CHEMICALS INC
PVS TECHNOLOGIES INC (AUGUSTA)
TDC LLC - WESTLAKE PLANT
THATCHER CO OF NEVADA
LASER PRODUCT INC.
GAC CHEMICAL CORP
FERRO CORP

1789 TRANSELCO DR
4135 RT 104
400 1ST AVE
1645 RIVER RD
7011 MUIRKIRK RD
183 GULBRANDSEN RD
103 ROBERTSON RD
1750 OVERVIEW DR
1405 POSSUM HOLLOW RD
1580 COLUMBIA NITROGEN RD
2402 DOUG BARNARD PKWY
204 SCM RD
5700 HUNT RD
1951 GUNTERSVILLE RD
1289 BRIDGESTONE PKWY
1205 BANNER HILL RD
1246 AIRPORT RD
30354 TRACY RD
515 KINGSDALE RD
1100 STATE RD
28960 LAKELAND BLVD
1000 BELT LINE ST
1099 IVANHOE RD
3676 DAVIS RD NW
4900 BEECH ST
7513 E 96TH ST
1740 ERIE RD
10825 HARPER AVE
7300 W BRADLEY RD
407 N 13TH ST
8130 LACKLAND RD
1110 W KEYSTONE AVE
5201 W 21ST ST
3000 N S ST
1513 ECHO RD
3007 BURNETT ST
1717 E FARGO AVE.
23119 DRAYTON ST
2311 S PULLMAN ST
525 CASTRO ST
3500 INDUSTRIAL WAY
2404 DOUG BARNARD PKWY
2800 OLD SPANISH TRL
90 BUSINESS CENTER STREET
RD 185 KM 19.0
34 KIDDER POINT RD
251 W WYLIE AVE

PENN YAN	YATES	NY	14527-
WILLIAMSON	WAYNE	NY	14589-
ROYERSFORD	MONTGOMERY	PA	19468-
NEW CASTLE	NEW CASTLE	DE	19720-
BELTSVILLE	PRINCE GEORGES	MD	20705-
ORANGEBURG	ORANGEBURG	SC	29115-
ROCK HILL	YORK	SC	29730-
ROCK HILL	YORK	SC	29730-
RANGER	GORDON	GA	30734-
AUGUSTA	RICHMOND	GA	30901-
AUGUSTA	RICHMOND	GA	30906-
BRUNSWICK	GLYNN	GA	31523-
VALDOSTA	LOWNDES	GA	31606-
ARAB	MARSHALL	AL	35016-
LA VERGNE	RUTHERFORD	TN	37086-
ERWIN	UNICOI	TN	37650-
SEVIERVILLE	SEVIER	TN	37862-
WALBRIDGE	WOOD	OH	43465-
STEUBENVILLE	JEFFERSON	OH	43952-
ASHTABULA	ASHTABULA	OH	44004-
WICKLIFFE	LAKE	OH	44092-
CLEVELAND	CUYAHOGA	OH	44109-
CLEVELAND	CUYAHOGA	OH	44110-
DOVER	TUSCARAWAS	OH	44622-
CINCINNATI	HAMILTON	OH	45212-
INDIANAPOLIS	MARION	IN	46256-
ERIE	MONROE	MI	48133-
DETROIT	WAYNE	MI	48213-
MILWAUKEE	MILWAUKEE	WI	53223-
MILWAUKEE	MILWAUKEE	WI	53233-
SAINT LOUIS	ST LOUIS	MO	63114-
CATOOSA	ROGERS	OK	74015-
TULSA	TULSA	OK	74107-
PASADENA	HARRIS	TX	77503-
ORANGE	ORANGE	TX	77632-
ORANGE	ORANGE	TX	77630-
NAMPA	CANYON	ID	83687-
SANTA CLARITA	LOS ANGELES	CA	91350-
SANTA ANA	ORANGE	CA	92705-
RICHMOND	CONTRA COSTA	CA	94801-
LONGVIEW	COWLITZ	WA	98632-
AUGUSTA	RICHMOND	GA	30906-
WESTLAKE	CALCASIEU PARISH	LA	70669-
HENDERSON	CLARK	NV	89014-
JUNCOS	JUNCOS	PR	00777-
SEARSPORT	WALDO	ME	04974-
WASHINGTON	WASHINGTON	PA	15301-

42.67554	-76.94458
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41.59324	-83.52793
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41.79387	-83.50629
42.395228	-82.996228
43.164444	-88.001944
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38.71078	-90.33261
36.22681	-95.747308
36.13353	-96.05298
29.74258	-95.17203
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30.072004	-93.769192
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34.411667	-118.539722
33.71359	-117.84282
37.940278	-122.377222
46.135318	-122.982824
33.340848	-81.957529
30.241889	-93.282167
36.033998	-115.018262
18.24245	-65.920136
44.4684	-68.8844
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3886	110000594198	325180		
3887	110000598416	325180		
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3893	110000747265	325180		
3894	110000747381	325180		
3896	110000859599	325180		
3897	110000860792	325180		
3898	110000871968	325180		
3899	110000873047	325180		
3900	110000902382	325180		
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3903	110001711568	325180		
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3905	110002108157	325180		
3906	110002112801	325180		
3907	110002151251	325180		
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3929	110019082188	325180		
3930	110022406662	325180	7205611	
3931	110022931666	325180		
3932	110024163126	325180		

MASON CORP
ERCO WORLDWIDE (USA) INC
IOCHEM CORP
HASA INC
CATALYST RECOVERY OF LOUISIANA LLC
SOUTHERN IONICS INC
KEMIRA WATER SOLUTIONS INC
CALABRIAN CORP
SHAC CATALYST PLANT
KEMIRA WATER SOLUTIONS INC
FINNCHEM USA INC
MGC PURE CHEMICALS AMERICA INC
ALLIED UNIVERSAL CORP
SENTRY INDUSTRIES INC
PRAXAIR SPECIALTY CERAMICS
ASPEN AEROGELS RHODE ISLAND LLC
FINNCHEM USA - EASTOVER
POROCEL INDUSTRIES LLC
ALLIED UNIVERSAL CORP
ZEOCHEM LLC
SHEPHERD MIDDLETOWN CO
KEMIRA WATER SOLUTIONS INC
BASF CORP - VIDALIA WORKS
UYEMURA INTERNATIONAL CORP
NORTH METAL & CHEMICAL CO
FABRICATED PRODUCTS INC DBA SEAFAB METALS CO
APL ENGINEERED MATERIALS INC
SCIENTIFIC DESIGN CO INC
INDUSTRIAL CHEMICALS CORP
ROCKWOOD LITHIUM INC
USALCO ASHTABULA PLANT SOUTH
CHEMTRADE PHOSPHORUS SPECIALTIES LLC
HJ BAKER & BRO INC
BIO-LAB INC
POWERLAB INC
HASA INC
TRANSENE CO INC
REAXIS INC
VANCHLOR CO INC
GULBRANDSEN TECHNOLOGIES INC
MIAMI PRODUCTS & CHEMICAL CO
NYACOL NANOTECHNOLOGIES INC
CRITERION CATALYSTS & TECHNOLOGIES LP PITTSBURG
EVONIK INDUSTRIES
ORION ENGINEERED CARBONS-IVANHOE CARBON BLACK PLANT
EAGLE US 2 LLC - LONGVIEW
CHEMOURS - MORSES MILL

1049 US HWY 41
101 HWY 73 S
3.5 MILES E ON US HWY 60
735 ELEVEN MILE CORNER RD
100 AMERICAN BLVD
12901 BAY PARK RD
18700 HWY 14 N
5500 HWY 366
16122 RIVER RD
14000 E SAN BERNARDINO AVE
2360 DOUG BARNARD PKWY
6560 S MOUNTAIN RD
8350 NW 93RD ST
5687 NW 36TH AVE
16130 WOOD RED RD SUITE 7
3 DEXTER ROAD
200 WATEREE STATION RD
10300 ARCH ST PIKE
30 NEIL GUNN DR
1314 S 12TH ST
3444 YANKEE RD
2315 N SULLIVAN RD
109 HWY 131
240 TOWN LINE RD
609 E KING ST
3201 LOWER RIVER RD BLDG 2575 W WING # 7
2401 N WILLOW RD
49 IND US TRIAL AVE
1 KM. S OF STATE RD 127 AT KM. 19.1
HWY 265
1741 W 47TH ST
440 B N 9TH ST
65 STORK RD
910 I-10 W OF LAKE CHARLES
1145 HWY 34 S
1251 LOVERIDGE RD
10 ELECTRONICS AVENUE
941 ROBINSON HWY
555 W JACKSON ST
9401 STRANG RD
1260 SCHWERMAN DR
211 MEGUNKO RD
2840 WILLOW PASS RD
7 SCHOOLHOUSE LN
7095 LA HWY 83
3541 INDUSTRIAL WAY
1400 PARK AVE

SCHERERVILLE	LAKE	IN	46375-
NEKOOSA	WOOD	WI	54457-
VICI	DEWEY	OK	73859-
ELOY	PINAL	AZ	85131-
LAFAYETTE	LAFAYETTE PARISH	LA	70508-
PASADENA	HARRIS	TX	77507-1101
MOJAVE	KERN	CA	93501-
PORT NECHES	JEFFERSON	TX	77651-
NORCO	ST CHARLES	LA	70079-
FONTANA	SAN BERNARDINO	CA	92335-
AUGUSTA	RICHMOND	GA	30906-
MESA	MARICOPA	AZ	85212-
MIAMI	MIAMI-DADE	FL	33166-
MIAMI	MIAMI-DADE	FL	33142-
WOODINVILLE	KING	WA	98072-
EAST PROVIDENCE	PROVIDENCE	RI	02914-
EASTOVER	RICHLAND	SC	29044-
LITTLE ROCK	PULASKI	AR	72206-
ELLISVILLE	JONES	MS	39437-
LOUISVILLE	JEFFERSON	KY	40210-
MIDDLETOWN	BUTLER	OH	45044-
SPOKANE VALLEY	SPOKANE	WA	99216-
VIDALIA	CONCORDIA PARISH	LA	71373-
SOUTHINGTON	HARTFORD	CT	06489-
YORK	YORK	PA	17403-
VANCOUVER	CLARK	WA	98660-
URBANA	CHAMPAIGN	IL	61802-
LITTLE FERRY	BERGEN	NJ	07643-
PENUELAS	PENUELAS	PR	00624-
SILVERPEAK	ESMERALDA	NV	89047-
ASHTABULA	ASHTABULA	OH	44004-
LAWRENCE	DOUGLAS	KS	66044-
STOCKTON	SAN JOAQUIN	CA	95203-
WESTLAKE	CALCASIEU PARISH	LA	70669-
TERRELL	KAUFMAN	TX	75160-
PITTSBURG	CONTRA COSTA	CA	94565-
DANVERS	ESSEX	MA	01923-
MC DONALD	WASHINGTON	PA	15057-
LOCKPORT	NIAGARA	NY	14094-
LA PORTE	HARRIS	TX	77571-
FAIRBORN	GREENE	OH	45324-
ASHLAND	MIDDLESEX	MA	01721-
PITTSBURG	CONTRA COSTA	CA	94565-
WATERFORD	SARATOGA	NY	12188-
FRANKLIN	ST MARY	LA	70538-
LONGVIEW	COWLITZ	WA	98632-
LINDEN	UNION	NJ	07036-

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3976	110067259861	325180		
3977	110067426645	325180		
3978	110067715271	325180		
3979	110069359660	325180		
3980	110069446987	325180		

TEXTILE RUBBER & CHEMICAL CO (PTG GROUP)
SOLVAY CHEMICALS INC
CHEMICAL SPECIALTIES INC
CARUS CORP BELMONT SITE
BLEACHTECH LLC
ALLIED NEW TECHNOLOGIES INC
BLUE LINE CORP
KEMIRA WATER SOLUTIONS INC
OLIN CORP
TDC LLC-CORPUS CHRISTI PLANT
BLEACHTECH LLC
AKZONOBEL (FORMERLY EKA CHEMICALS INC)
KEMIRA WATER SOLUTIONS INC
ENERGIZER MANUFACTURING INC
FSTI WATERLOO PLANT
THATCHER CO OF ARIZONA
PIONEER AMERICAS LLC D/B/A OLIN CHLOR ALKALI PRODUCTS
TODA AMERICA INC
QUALLION LLC MANN BIOMEDICAL PARK BUILDING 61
SID RICHARDSON CARBON CO
TRONOX LLC
OCCIDENTAL CHEMICAL CORP (OXYCHEM)
PRINCE MINERALS LLC
EURECAT US
MOLYCORP RARE METALS (OKLAHOMA) LLC
HJ BAKER & BRO INC
CERADYNE INC A 3M CO
AXENS NA INC
ARCH CHEMICALS INC
CHEMOURS - RED LION PLANT
CABOT CORP FMO DIV
VERTEX CHEMICAL CORP
AMERICAN IRON OXIDE CO PORTAGE
COLORADO SALT PRODUCTS LLC
HASA INC
MADISON INDUSTRIES
ECO-SERVICES OPERATIONS
IODITECH INC
HYDRITE CHEMICAL CO
CHEMOURS LAPORTE PLANT
USALCO FAIRFIELD PLANT LLC
OLD BRIDGE CHEMIACLS INC
CHEMICAL FORMULATORS INC
OMNI OXIDE
JONES-HAMILTON CO
CAPITOL SKYMINE
CABOT CORP PAMPA DEVELOPMENT & MANUFACTURING CENTER

1300 TIARCO DR
1130 INDEPENDANCE PARKWAY SOUTH
302 MIDWAY (CR 624)
181 WOODLAWN AVE
320 RYAN RD
9545 RANGELINE RD
3443 E COMMERCE ST
3761 CANAL ST
1638 IND US TRIAL RD
3801 BUDDY LAWRENCE
2020 BESSEMER RD
4374 NASHVILLE FERRY RD E
3925 FORT ARMISTEAD RD
2036 BLUE KNOB RD
341 LONGMILE ROAD
6321 S RAINBOW RD
350 FOURTH ST
4750 W DICKMAN RD
25161 RYE CANYON LOOP
5221 SID RICHARDSON RD
560 W LAKE MEAD PKWY
1900 DUPONT RD
4039 W GREEN TREE RD
100 STEVEN TAYLOR BLVD
3225 S 625 RD
1001 SCHLEY AVE
3250 S 614 RD
74 CATALYST DR
960 I-10 W
766 GOVERNOR LEA RD
700 E US HWY 36 W
3101 CARONDELET
6300 US HWY RT 12
3910 JOLIET STREET
3401 INDUSTRIAL WAY GATE 10 AREA 42
554 WATERWORKS ROAD
1301 AIRLINE HWY
951 N TOPPING AVE
2400 S. ERIE CANAL RD
12350 STRANG RD
3700 DIXIE HWY
554 WATERWORKS ROAD
5215 W TYSON AVE
10665 N ST RD 59
4433 RICHBURG RD
11503 BULVERDE RD
5 MILES W ON US .HWY 60

DALTON	WHITFIELD	GA	30721-
LA PORTE	HARRIS	TX	77571-
FREEPORT	BRAZORIA	TX	77541-
BELMONT	GASTON	NC	28012-
SEVILLE	MEDINA	OH	44273-
FORT PIERCE	ST LUCIE	FL	34987-
SAN ANTONIO	BEXAR	TX	78220-
EAST CHICAGO	LAKE	IN	46312-
MC INTOSH	WASHINGTON	AL	36553-
CORPUS CHRISTI	NUECES	TX	78408-
PETERSBURG	PETERSBURG (CITY)	VA	23805-
COLUMBUS	LOWNDES	MS	39702-
BALTIMORE	BALTIMORE (CITY)	MD	21226-
MARIETTA	WASHINGTON	OH	45750-
GREENVILLE	HUNT	TX	75402-
BUCKEYE	MARICOPA	AZ	85326-
HENDERSON	CLARK	NV	89015-
BATTLE CREEK	CALHOUN	MI	49037-
SANTA CLARITA	LOS ANGELES	CA	91355-
ADDIS	WEST BATON ROUGE	LA	70710-
HENDERSON	CLARK	NV	89015-
NEW JOHNSONVILLE	HUMPHREYS	TN	37134-
MILWAUKEE	MILWAUKEE	WI	53209-
MCALESTER	PITTSBURG	OK	74501-
QUAPAW	OTTAWA	OK	74363-
WILMINGTON	LOS ANGELES	CA	90744-
QUAPAW	OTTAWA	OK	74363-
BELMONT	PLEASANTS	WV	26134-
WESTLAKE	CALCASIEU PARISH	LA	70669-
DELAWARE CITY	NEW CASTLE	DE	19706-
TUSCOLA	DOUGLAS	IL	61953-
DUPO	ST CLAIR	IL	62239-
PORTAGE	PORTER	IN	46368-
DENVER	DENVER	CO	80239-
LONGVIEW	COWLITZ	WA	98632-
OLD BRIDGE	MIDDLESEX	NJ	08857-
BATON ROUGE	EAST BATON ROUGE	LA	70805-
KANSAS CITY	JACKSON	MO	64120-
TERRE HAUTE	VIGO	IN	47802-
LA PORTE	HARRIS	TX	77571-
FAIRFIELD	BUTLER	OH	45014-
OLD BRIDGE	MIDDLESEX	NJ	08857-
TAMPA	HILLSBOROUGH	FL	33611-
BRAZIL	CLAY	IN	47834-
RICHBURG	CHESTER	SC	29729-
SAN ANTONIO	BEXAR	TX	78217-
PAMPA	GRAY	TX	79065-

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4025	110000606728	325194		
4026	110007374206	325194		
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ADVANCED RESEARCH CHEMICALS INC
GRACE DAVISON-EDISON
COLUMBIA PACIFIC BIO-REFINERY
PHARMCO PRODUCTS
KMX CHEMICAL CORP
PHARMCO PRODUCTS
ABE SOUTH DAKOTA LLC
MONTCO RESEARCH PRODUCTS INC
PARALLEL PRODUCTS OF KENTUCKY
WESTERN PLAINS ENERGY LLC
TRENTON AGRI PRODUCTS LLC
STERLING ETHANOL LLC
PINE LAKE CORN PROCESSORS
IROQUOIS BIO-ENERGY CO LLC
CENTRAL INDIANA ETHANOL LLC
ANDERSONS CLYMERS ETHANOL LLC
FLINT HILLS RESOURCES FAIRMONT LLC
HOMELAND ENERGY SOLUTIONS LLC
POET BIOREFINING-PORTLAND LLC
HERON LAKE BIOENERGY LLC
POET BIOREFINING-NORTH MANCHESTER
WESTERN NEW YORK ENERGY LLC
PLAINVIEW BIOENERGY LLC
POET BIOREFINING-CLOVERDALE LLC
GREEN PLAINS HEREFORD LLC
MID AMERICA AGRI PRODUCTS WHEATLAND LLC
KANSAS ETHANOL LLC
PENNSYLVANIA GRAIN PROCESSING LLC
CARDINAL ETHANOL LLC
POET BIOREFINING ALEXANDRIA
BRIDGEPORT ETHANOL LLC
THREE RIVERS ENERGY LLC
GUARDIAN LIMA LLC
PACIFIC ETHANOL -AURORA WEST LLC
DUPONT
SUNOCO FULTON ETHANOL PLANT
POET-DSM PROJECT LIBERTY LLC
DAKOTA SPIRIT AGENERGY LLC
CHIEF ETHANOL FUELS INC
ARIZONA CHEMICAL CO LLC
PLASMINE TECHNOLOGY INC
STELLA-JONES CORP
KINGSFORD MANUFACTURING CO
ROYAL OAK ENT LLC
ROYAL OAK ENTERPRISES LLC
ROYAL OAK ENTERPRISES LLC
ROYAL OAK ENTERPRISES LLC

5005 N SKIATOOK RD
340 MEADOW RD
81200 KALLUNKI RD
58 VALE RD
30474 ENERGY DR
1101 ISAAC SHELBY DR
38469 133RD ST
END OF JANICE DR
1620 BERNHEIM LN
3022 COUNTY RD 18
36638 US HWY 34
450 ANGUS AVE
33371 170TH ST
751 W STATE RD 114
2955 W DELPHI PIKE
3389 W CR 300 S
1214 COUNTY RD G
2779 IA HIGHWAY 24
1542 S 200 W
91246 390TH AVE
868 E 800 N
4141 BATES RD
2698 E HIGHWAY 70
2265 E COUNTY RD 800 S
4300 COUNTY RD 8
76080 RD 338 PO BOX 110
1630 AVENUE Q
250 TECHNOLOGY DR
1554 N 600 E
13179 N 100 E
10106 SOUTH RAILROAD AVENUE
18137 COUNTY ROAD 271
2485 HOUX PKWY
2103 HARVEST DR
200 INDUSTRIAL DR
376 OWENS RD
3848 470TH AVE
3361 93RD AVENUE SE
1111 EAST INDUSTRY DRIVE
1201 W LATHROP AVE
251 NEWPORT PKWY
1471 CHANNEL AVE
RTE 46
SHANNON COUNTY RD 341
RT 5 BOX 96
HWY EE RD #460
18351 SPARROW DR

CATOOSA	ROGERS	OK	74015-
EDISON	MIDDLESEX	NJ	08817-
CLATSKANIE	COLUMBIA	OR	97016-
BROOKFIELD	FAIRFIELD	CT	06804-
NEW CHURCH	ACCOMACK	VA	23415-
SHELBYVILLE	SHELBY	KY	40065-
ABERDEEN	BROWN	SD	57401-
HOLLISTER	PUTNAM	FL	32147-
LOUISVILLE	JEFFERSON	KY	40210-
OAKLEY	GOVE	KS	67748-
TRENTON	HITCHCOCK	NE	69044-
STERLING	LOGAN	CO	80751-
STEAMBOAT ROCK	HARDIN	IA	50672-
RENSSELAER	JASPER	IN	47978-
MARION	GRANT	IN	46952-
LOGANSPORT	CASS	IN	46947-
FAIRMONT	FILLMORE	NE	68354-
LAWLER	CHICKASAW	IA	52154-
PORTLAND	JAY	IN	47371-
HERON LAKE	JACKSON	MN	56137-
NORTH MANCHESTER	WABASH	IN	46962-
MEDINA	ORLEANS	NY	14103-
PLAINVIEW	HALE	TX	79072-
CLOVERDALE	PUTNAM	IN	46120-
HEREFORD	DEAF SMITH	TX	79045-
MADRID	PERKINS	NE	69150-
LYONS	RICE	KS	67554-
CLEARFIELD	CLEARFIELD	PA	16830-
UNION CITY	RANDOLPH	IN	47390-
ALEXANDRIA	MADISON	IN	46001-
BRIDGEPORT	MORRILL	NE	69336-
COSHOCTON	COSHOCTON	OH	43812-
LIMA	ALLEN	OH	45804-
AURORA	HAMILTON	NE	68818-
VONORE	MONROE	TN	37885-
FULTON	OSWEGO	NY	13069-
EMMETSBURG	PALO ALTO	IA	50536-
SPIRITWOOD	STUTSMAN	ND	58481-
LEXINGTON	DAWSON	NE	68850-
SAVANNAH	CHATHAM	GA	31415-
BAY MINETTE	BALDWIN	AL	36507-
MEMPHIS	SHELBY	TN	38109-
BERYL	MINERAL	WV	26726-
SUMMERSVILLE	SHANNON	MO	65571-
HUNTSVILLE	MADISON	AR	72740-
BELLE	MARIES	MO	65013-
LICKING	TEXAS	MO	65542-

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4073	110000369119	325199		
4074	110000374336	325199		
4075	110000378788	325199		

LONE STAR SPECIALTIES LLC
ASHLAND SPECIALTY INGREDIENTS
ROYAL OAK ENTERPRISES LLC
ROYAL OAK ENTERPRISES LLC
ROYAL OAK ENTERPRISES LLC
COOPERS CREEK CHEMICAL CORP
NEWARK MANUFACTURING PLANT
ROYAL OAK ENTERPRISES LLC
ROYAL OAK ENTERPRISES LLC
CAMPBELL TRANSPORTATION CO INC
FIRMENICH INC
HEXION INC
FLOW POLYMERS LLC
ORTEC INC
PHOTO SYSTEMS INC/BOTTCHER AMERICA
ALLCHEM SERVICES INC
DEEPWATER CHEMICALS INC
MOC PRODUCTS CO INC
MOSES LAKE INDUSTRIES INC
BLUE CUBE OPERATIONS LLC - PLAQUEMINE SITE
CYTEC INDUSTRIES INC
CRI TOLLING LLC
ORTEC INC PIEDMONT
ISP CHEMICALS LLC
CARGILL INC
VWR CHEMICALS LLC
PURIFICATION TECHNOLOGIES INC
KENRICH PETROCHEMICALS, INC.
ISP CHEMICALS LLC
TWIN LAKE CHEMICAL INC
TOWER PRODUCTS INC
NORQUAY TECHNOLOGY INC
QUAKER CITY CHEMICALS
LINDAU CHEMICALS INC
SANTOLUBES MANUFACTURING LLC DBA BLACKMAN UHLER SPECIALTIES
SYMRISE INC
ETHOX CHEMICALS LLC
APOLLO TECHNOLOGIES
PEACH STATE LABORATORIES LLC
PEACH STATE LABS LLC - DALTON
DYSTAR LP
ROYAL ADHESIVES & SEALANTS LLC
PEACH STATE LABS LLC - COLUMBUS
SOLUTIA INC ANNISTON PLANT
MORGAN FUEL LLC
DELTA FOREMOST CHEMICAL CORP
RUSSTECH ADMIXTURES INC

6412 US HWY 259 S
1018 VISTA DR
18042 HWY B
9916 CR 2780
385 HARRY BROWN RD
884 RIVER RD
1780 TAMARACK RD
724 MARION COUNTY 3026
13870 HIGHWAY 70 N
2567 CONGO ARROYO RD
250 PLAINSBORO RD
200 RAILROAD ST
12819 COIT RD
505 GENTRY MEMORIAL HWY
7200 HURON RIVER DR
9011 E ALMEDA RD
1210 AIRPARK RD
12306 MONTAGUE ST
8248 RANDOLPH RD NE
21255 HIGHWAY 1 S
7910 MT JOY RD
300 INTERNATIONAL BLVD
465 OLD PELZER RD
1979 ATLAS ST
206 BROOKHOLLOW IND US TRIAL BLVD
6351 INDUCON DR E
67 WINTHROP RD
140 EAST 22ND STREET
116 SUMMIT AVE
520 MILL ST
2703 FREEMANSBURG AVE
800 W FRONT ST
7360 MILNOR ST
750 GRANBY LN
2155 W CROFT CIR
1636 B US HY PARK RD
1801 PERIMETER RD
1850 S COBB INDUSTRIAL BLVD
180 BURLINGTON RD
1202 DOZIER ST
2474 ABUTMENT RD
1010 VISTA DR
1136 CHUMAR ST
702 CLYDESDALE AVE
200 W LEE ST
3915 AIR PARK ST
11208 DECIMAL DR

LONE STAR	MORRIS	TX	75668-
DALTON	WHITFIELD	GA	30721-
CENTERVILLE	REYNOLDS	MO	63633-
MOUNTAIN VIEW	HOWELL	MO	65548-
LESLIE	SEARCY	AR	72645-
CONSHOHOCKEN	MONTGOMERY	PA	19428-
NEWARK	LICKING	OH	43055-
YELLVILLE	MARION	AR	72687-
MONTEREY	CUMBERLAND	TN	38574-
NEWELL	HANCOCK	WV	26050-
PLAINSBORO	MIDDLESEX	NJ	08536-
ROEBUCK	SPARTANBURG	SC	29376-
CLEVELAND	CUYAHOGA	OH	44108-
EASLEY	PICKENS	SC	29640-
DEXTER	WASHTENAW	MI	48130-
HOUSTON	HARRIS	TX	77054-
WOODWARD	WOODWARD	OK	73801-
PACOIMA	LOS ANGELES	CA	91331-
MOSES LAKE	GRANT	WA	98837-
PLAQUEMINE	IBERVILLE	LA	70765-
MOUNT PLEASANT	MAURY	TN	38474-
FOUNTAIN INN	LAURENS	SC	29644-
PIEDMONT	GREENVILLE	SC	29673-
COLUMBUS	FRANKLIN	OH	43228-
DALTON	WHITFIELD	GA	30721-
SANBORN	NIAGARA	NY	14132-
CHESTER	MIDDLESEX	CT	06412-
BAYONNE	HUDSON	NJ	07002-
CHATHAM	MORRIS	NJ	07928-
LOCKPORT	NIAGARA	NY	14094-
EASTON	NORTHAMPTON	PA	18045-
CHESTER	DELAWARE	PA	19013-
PHILADELPHIA	PHILADELPHIA	PA	19136-
COLUMBIA	RICHLAND	SC	29201-
SPARTANBURG	SPARTANBURG	SC	29302-
GOOSE CREEK	BERKELEY	SC	29445-
GREENVILLE	GREENVILLE	SC	29605-
SMYRNA	COBB	GA	30082-
ROME	FLOYD	GA	30161-
DALTON	WHITFIELD	GA	30721-
DALTON	WHITFIELD	GA	30721-
DALTON	WHITFIELD	GA	30721-
COLUMBUS	MUSCOGEE	GA	31904-
ANNISTON	CALHOUN	AL	36201-
ENTERPRISE	COFFEE	AL	36330-
MEMPHIS	SHELBY	TN	38118-
LOUISVILLE	JEFFERSON	KY	40299-

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36.04815	-85.20804
40.6082	-80.63586
40.331944	-74.619722
34.876111	-81.971667
41.55382	-81.59439
34.834611	-82.623583
42.33783	-83.87275
29.675771	-95.394859
36.435074	-99.512447
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47.203333	-119.293611
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34.669669	-82.194937
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39.99105	-83.14306
34.708889	-84.957778
43.120561	-78.917265
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43.184167	-78.699722
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34.34108	-85.07556
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34.715162	-84.961624
34.7985	-84.9493
32.519129	-84.973933
33.65099	-85.85197
31.31445	-85.85614
35.04178	-89.93123
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4096	110000572782	325199		
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4098	110000598041	325199		
4099	110000599479	325199		
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4101	110000701483	325199		
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4103	110000789692	325199		
4104	110000796014	325199		
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4111	110003445790	325199		
4112	110003705027	325199		
4113	110004656961	325199		
4114	110005033454	325199		
4115	110005125587	325199		
4116	110005172357	325199		
4117	110005184987	325199		
4118	110005186510	325199		
4119	110006175370	325199		
4120	110006847582	325199		
4121	110007088668	325199		
4122	110009115545	325199		

ORGANIC TECHNOLOGIES
GABRIEL PERFORMANCE PRODUCTS LLC
UNITED INITIATORS INC
POLYMER ADDITIVES-CLEVELAND PLANT
ACS TECHNICAL PRODUCTS, INC.
PB LEINER USA
GENENCOR INTERNATIONAL WISCONSIN INC
NALCO COMPANY-SCOTT
LYCUS LTD
SACHEM INC
SYNTECH CHEMICALS INC
TRECORA CHEMICAL INC
SACHEM INC
INNOPHOS NUTRITION OGDEN
NALCO CO
VANDERBILT CHEMICALS LLC-MURRAY DIV
KING INDUSTRIES INC
KEMIRA CHEMICALS INC
CHANNEL CHEMICAL CORP
LUBRIZOL ADVANCED MATERIALS
ADDIVANT USA LLC-NORTH PLANT
EVONIK CORP
NORAC INC
KEESHAN & BOST CHEMICAL CO,INC
NALCO COMPANY-ODESSA PLANT 114
POLYMER ADDITIVES INC DBA VALTRIS SPECIALTY CHEMICALS
ISLECHEM LLC
INTEGRATED DNA TECHNOLOGIES
CAMBRIDGE ISOTOPE LABORATORIES INC
BEDOUKIAN RESEARCH INC
ADDIVANT USA LLC
FLEURCHEM INC
APPLIED MATERIAL SOLUTIONS INC DBA NOTTINGHAM CO
NUSIL TECHNOLOGY LLC
IOFINA CHEMICAL INC
CHEMGENES CORP
CAYMAN CHEMICAL CO INC
HERAEUS PRECIOUS METALS NA DAYCHEM LLC
ARROW MAGNOLIA INTERNATIONAL
NOVA MOLECULAR TECHNOLOGIES I NC
NISSAN CHEMICAL AMERICA PASADENA PLANT
BASF CORP
ARKEMA INC
CHEM FLUER/FIRMENICH INC
HALOCARBON PRODUCTS CORP
BULK CHEMICAL SERVICES LLC
CHEMICALS INC

1245 S 6TH ST
725 STATE RD
555 GARDEN ST
1636 WAYSIDE RD
420 S COLFAX AVE
7001 BRADY ST
2600 KENNEDY DR
812 RENAUD DR
181 COOPER DR
2311 PIPELINE RD
14822 HOOPER RD
12500 BAY AREA BLVD
821 WOODWARD ST
1675 W 2750 S
2111 E DOMINGUEZ ST
396 PELLA WAY
SCIENCE RD
6601 CANAL ST
14373 SEAWAY RD
195 BROOKS BLVD
1000 MORGANTOWN INDUSTRIAL PARK
3606 HWY 44
360 PHILLIPS 311 RD
22102 HWY 6
12205 W COUNTY RD 125
7050 KRICK RD
2801 LONG RD
1710 COMMERCIAL PARK
50 FRONTAGE RD
21 FINANCE DR
43300 HWY 225
33 SPRAGUE AVE
1303 BOYD AVE
2343 PEGASUS DR
1025 MARY LAIDLEY DR
33 INDUSTRIAL WAY
1180 E ELLSWORTH RD
970 IND US TRIAL PARK DR
2646 RODNEY LN
10200 BAY AREA BLVD
12330 BAY AREA BLVD
12502 BAY AREA BLVD
4631 OLD HIGHWAY 146
150 FIRMENICH WAY
1100 DITTMAN CT
726 INDUSTRIAL DR
12321 HATCHERVILLE RD

COSHOCTON	COSHOCTON	OH	43812-
ASHTABULA	ASHTABULA	OH	44004-
ELYRIA	LORAIN	OH	44035-
CLEVELAND	CUYAHOGA	OH	44112-
GRIFFITH	LAKE	IN	46319-
DAVENPORT	SCOTT	IA	52806-
BELOIT	ROCK	WI	53511-
SCOTT	LAFAYETTE	LA	70583-
EL DORADO	UNION	AR	71730-
CLEBURNE	JOHNSON	TX	76033-
HOUSTON	HARRIS	TX	77047-
PASADENA	HARRIS	TX	77507-
AUSTIN	TRAVIS	TX	78704-
OGDEN	WEBER	UT	84401-
LONG BEACH	LOS ANGELES	CA	90810-
MURRAY	CALLOWAY	KY	42071-
NORWALK	FAIRFIELD	CT	06852-
COLUMBUS	MUSCOGEE	GA	31907-
GULFPORT	HARRISON	MS	39503-
SPARTANBURG	SPARTANBURG	SC	29307-
MORGANTOWN	MONONGALIA	WV	26501-
GARYVILLE	ST JOHN THE BAPTIST PARIS	LA	70051-
HELENA	PHILLIPS	AR	72342-
MANVEL	BRAZORIA	TX	77578-
ODESSA	MIDLAND	TX	79765-
WALTON HILLS	CUYAHOGA	OH	44146-
GRAND ISLAND	ERIE	NY	14072-
CORALVILLE	JOHNSON	IA	52241-
ANDOVER	ESSEX	MA	01810-
DANBURY	FAIRFIELD	CT	06810-
BAY MINETTE	BALDWIN	AL	36507-
MIDDLETOWN	ORANGE	NY	10940-
ATLANTA	FULTON	GA	30318-
BAKERSFIELD	KERN	CA	93308-
COVINGTON	KENTON	KY	41017-
WILMINGTON	MIDDLESEX	MA	01887-
ANN ARBOR	WASHTENAW	MI	48108-
VANDALIA	MONTGOMERY	OH	45377-
DALLAS	DALLAS	TX	75229-
PASADENA	HARRIS	TX	77507-
PASADENA	HARRIS	TX	77507-
PASADENA	HARRIS	TX	77507-
SEABROOK	HARRIS	TX	77586-
NEWARK	ESSEX	NJ	07114-
NORTH AUGUSTA	AIKEN	SC	29841-
SANDERSVILLE	WASHINGTON	GA	31082-
BAYTOWN	CHAMBERS	TX	77521-

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43.0485	-78.99576
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42.63173	-71.18155
41.40957	-73.42436
30.869722	-87.863789
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33.79024	-84.41927
35.4273	-119.06431
39.00231	-84.534138
42.52832	-71.14323
42.22971	-83.72445
39.87715	-84.18495
32.900278	-96.8875
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4159	110037299562	325199		
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4161	110037445235	325199		
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4163	110038365382	325199		
4164	110039181079	325199		
4165	110039626170	325199		
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4167	110042025411	325199		
4168	110043228833	325199		
4169	110043653356	325199		

KMG ELECTRONIC CHEMICALS INC
D B WESTERN INC TEXAS
ARICHEM LLC
RSA CORP
COMPLEX CHEMICALS CO INC
CENTAURI TECHNOLOGIES
HUNTSMAN ETHYLENEAMINES PLANT
MATERIA INC
ENTEGRIS INC
GELEST INC
BAERLOCHER PRODUCTION USA LLC
SHIN-ETSU SILICONES OF AMERICA INC
INNOVATIVE CHEMICAL TECHNOLOGIES INC
AC&S INC
REG RALSTON LLC
ARKEMA INC
HALLSTAR CO MEMPHIS SOLUTIONS FACILITY
REG NEWTON LLC
REG ALBERT LEA
US BIOFUELS INC
ULTRA PURE SOLUTIONS
INNOVATIVE ORGANICS
LAKE ERIE BIOFUELS
REG GRAYS HARBOR LLC
FISHER SCIENTIFIC CO LLC
DELEK RENEWABLES LLC
WESTERN IOWA ENERGY LLC
REG MASON CITY LLC
EUROFINS MWG OPERON INC
UNITED INITIATORS INC
WESTERN DUBUQUE BIODIESEL LLC
TCI AMERICA
AG PROCESSING INC-ALGONA METHYL ESTER
DELEK RENEWABLES LLC
SI GROUP-NEWPORT TN
IOWA RENEWABLE ENERGY LLC
EVER CAT FUELS LLC
PASEO CARGILL ENERGY LLC
REG HOUSTON LLC
LANXESS CORP BUSHY PARK PLANT
ALBEMARLE CORP
NOVOZYMES BLAIR INC
GAYLORD CHEMICAL CO LLC
P CHEM INC
TIARCO CHEMICAL
UNIVATION TECHNOLOGIES LLC
INTEGRATED DNA TECHNOLOGIES

2340 BERT DR
12511 STRANG RD
187 SLOSS INDUSTRIES RD
36 OLD SHERMAN TURNPIKE
MADISON PARISH IND US TRIAL PARK 177 COMPLEX CHEMI
5200 UNDERWOOD RD
307 COUNTY RD 624 A1, A38 BLOCK
7629 STATE HWY 75 S
706 HO US TON CLINTON DR
11 E STEEL RD
5890 HIGHLAND RIDGE DR
5650 HWY 332 E
8 RIVERSIDE DR SW
W 19TH ST
33321 215 ST
3289 GENESEE STREET
2500 CHANNEL AVE
3426 E 28TH ST N
15200 780TH AVE
555 W HERMITAGE RD NE
11225 COMMERCIAL PKWY
4905 E HUNTER AVE
1670 E LAKE RD
3122 PORT IND US TRIAL RD
755 RT 202
3102 WINDMILL RD
1220 S CENTER STREET
4172 19TH ST SW
2211 SEMINOLE DR
334 PHILLIPS 311 RD
904 JAMESMEIER RD
13135 N. WOODRUSH WAY
2108 140TH AVE
117 MAC MCGOOGAN DR
380 CHEMWOOD DR
1701 E 7TH ST
100 ISANTI PARKWAY NE
2111 NICHOLSON AVENUE
11815 PORT RD
1530 BUSHY PARK RD
1664 E HIGHLAND RD
600 S 1ST ST
1880 FAIRLAWN RD
3985 US HWY 287 NORTH
315 ECHELON RD
1100 SCIENCE PARK DRIVE
6828 NANCY RIDGE DR SUITE # 400

HOLLISTER	SAN BENITO	CA	95023-
LA PORTE	HARRIS	TX	77571-
ARITON	DALE	AL	36311-
DANBURY	FAIRFIELD	CT	06810-
TALLULAH	MADISON	LA	71282-
PASADENA	HARRIS	TX	77507-
FREEPORT	BRAZORIA	TX	77541-
HUNTSVILLE	WALKER	TX	77340-
BURNET	BURNET	TX	78611-
MORRISVILLE	BUCKS	PA	19067-
CINCINNATI	HAMILTON	OH	45232-
FREEPORT	BRAZORIA	TX	77541-
CARTERSVILLE	BARTOW	GA	30120-
NITRO	PUTNAM	WV	25143-
RALSTON	CARROLL	IA	51459-
PIFFARD	LIVINGSTON	NY	14533-
MEMPHIS	SHELBY	TN	38113-
NEWTON	JASPER	IA	50208-
ALBERT LEA	FREEBORN	MN	56007-
ROME	FLOYD	GA	30161-
CASTROVILLE	MONTEREY	CA	95012-
ANAHEIM	ORANGE	CA	92807-
ERIE	ERIE	PA	16511-
HOQUIAM	GRAYS HARBOR	WA	98550-
BRIDGEWATER	SOMERSET	NJ	08807-
CLEBURNE	JOHNSON	TX	76033-
WALL LAKE	SAC	IA	51466-
MASON CITY	CERRO GORDO	IA	50401-
HUNTSVILLE	MADISON	AL	35805-
HELENA	PHILLIPS	AR	72342-
FARLEY	DUBUQUE	IA	52046-
PORTLAND	MULTNOMAH	OR	97203-
ALGONA	KOSSUTH	IA	50511-
CROSSETT	ARKANSAS	AR	71635-
NEWPORT	COCKE	TN	37821-
WASHINGTON	WASHINGTON	IA	52353-
ISANTI	ISANTI	MN	55040-
KANSAS CITY	JACKSON	MO	64120-
SEABROOK	HARRIS	TX	77586-
GOOSE CREEK	BERKELEY	SC	29445-
TWINSBURG	SUMMIT	OH	44087-
BLAIR	WASHINGTON	NE	68008-
TUSCALOOSA	TUSCALOOSA	AL	35401-
LATEXO	HOUSTON	TX	75849-
GREENVILLE	GREENVILLE	SC	29605-
SOUTH CHARLESTON	KANAWHA	WV	25303-
SAN DIEGO	SAN DIEGO	CA	92121-

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41.73291	-93.01942
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34.3273	-85.0918
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45.61875	-122.7675
43.077561	-94.18751
33.133528	-91.942389
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29.60393	-95.02538
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4197	110069727674	325199		
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4200	110000593144	325211 325510 325520 325998		
4201	110035815348	325211 325998 325613		
4202	110000384138	325211 325199		
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4206	110056954880	325211 325199		
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4208	110000334816	325211 325212		
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4210	110069500463	325211 325998		
4211	110000375647	325211 326113		
4212	110022811402	325211 336991	14508911	
4213	110000856538	325211 541712		
4214	110000308131	325211		
4215	110000308989	325211	7240511	
4216	110000310510	325211		
4217	110000311332	325211		
4218	110000312215	325211		

AGILYX TIGARD OPERATIONS
CHEMICALS INC BAY CITY SITE
MYRIANT CORP
AMERICAN GREENFUELS LLC
INTEGRITY BIOFUELS
HEXION INC-MOREAU FACILITY
TAMINCO US LLC
ADVANCED BIOTECH
REG NEW BOSTON LLC
NOVA MOLECULAR SUMTER LLC
AMERICAN ACRYL LP
CHEMOURS CHAMBERS WORKS
PROVIRON INC
ELEMENTIS SPECIATIES INC
METHANEX USA LLC
UNITED INITIATORS
STABOND CORP
EMERY OLEOCHEMICALS LLC CINCINNATI PLANT
OLIN BLUE CUBE FREEPORT TX
INFINEUM USA LP-BAYWAY CHEMICAL PLANT
CELANESE LTD CLEAR LAKE PLANT
AJINOMOTO NA INC
SKW QUAB CHEMICALS
ADDIVANT USA LLC - SOUTH PLANT
ASHLAND SPECIALTY INGREDIENTS (PARLIN PLANT)
MAINE STANDARD BIOFUELS
COVESTRO LLC
SILAR LLC SILAR LABORATORIES
DOW CORNING CORP AUBURN SITE
OMNOVA SOLUTIONS INC
ARCLIN USA LLC
ARCLIN USA LLC
PROMERUS LLC
HEXION INC
ARCLIN USA LLC
SEKISUI SPECIALTY CHEMICALS AMERICA LLC - PASADENA PLANT
POLYTEK DEVELOPMENT CORP
AOC LLC TENNESSEE PLANT
SOLENIS LLC
PLASKOLITE SOUTH LLC
MUSTANG MOTORCYCLE PRODUCTS LLC
SOLVAY SPECIALTY POLYMERS USA LLC-ALPHARETTA
CHEMIPLASTICA INC
LEWCOTT CORP D/B/A BARRDAY COMPOSITE SOLUTIONS
INTERPOLYMER CORP
HAPCO INC
DEVELOPMENT ASSOCIATES INC

7904 SW HUNZIKER AVE
8055 STATE HWY 60 S
525 PORT RD
30 WATERFRONT ST
780 INDUSTRIAL DRIVE
64 FARNAN RD
3790 LA HWY 30
10 TAFT RD
280 TEXAS AVE
749 INDUSTRIAL RD
4631 OLD HWY 146
67 CANAL ROAD
62 INDUSTRIAL PARK RD
RT 2 N
4171 HWY 73
4201 EVONIK RD
1722 W 139TH ST
4900 ESTE AVE
2301 N. BRAZOSPORT BLVD.
CORNER OF PARK & BRUNSWICK AVENUES
9502 BAYPORT BLVD
1 AJINOMOTO DR
4201 DEGUSSA RD
1000 MORGANTOWN INDUSTRIAL PARK, BLG 816
50 S MINISINK AVE
51 INGERSOL DR
8500 W BAY RD MS-21
333 NEILS EDDY ROAD
5300 ELEVEN MILE RD
1455 J A COCHRAN BY-PASS
6175 AMERICAN RD
344 TANNEHILL RD
9921 BRECKSVILLE RD
62575 OREGON HWY 82
14139 US HWY 84
1423 HWY 225
55 HILTON ST
860 HWY 57 E
3366 NW YEON AVE
10500 HIGH POINT RD
4 SPRINGFIELD ST
4500 MCGINNIS FERRY RD
238 NONOTUCK ST
86 PROVIDENCE RD
200 DAN RD
353 CIRCUIT ST
300 OLD BAPTIST RD

TIGARD	WASHINGTON	OR	97223-
BAY CITY	MATAGORDA	TX	77414-
LAKE PROVIDENCE	EAST CARROLL	LA	71254-
EAST HAVEN	NEW HAVEN	CT	06512-
MORRISTOWN	SHELBY	IN	46161-
SOUTH GLENS FALLS	SARATOGA	NY	12803-
SAINT GABRIEL	IBERVILLE	LA	70776-
TOTOWA	PASSAIC	NJ	07512-
NEW BOSTON	BOWIE	TX	75570-
SUMTER	SUMTER	SC	29150-
SEABROOK	HARRIS	TX	77586-
DEEPWATER	SALEM	NJ	08023-
FRIENDLY	TYLER	WV	26146-
NEW MARTINSVILLE	MARSHALL	WV	26155-
GEISMAR	ASCENSION PARISH	LA	70734-
THEODORE	MOBILE	AL	36590-
GARDENA	LOS ANGELES	CA	90249-
CINCINNATI	HAMILTON	OH	45232-
FREEPORT	BRAZORIA	TX	77541-
LINDEN	UNION	NJ	07036-
PASADENA	HARRIS	TX	77507-
EDDYVILLE	MONROE	IA	52553-
THEODORE	MOBILE	AL	36582-
MORGANTOWN	MONONGALIA	WV	26501-
PARLIN	MIDDLESEX	NJ	08859-
PORTLAND	CUMBERLAND	ME	04103-
BAYTOWN	CHAMBERS	TX	77523-
RIEGELWOOD	COLUMBUS	NC	28456-
AUBURN	BAY	MI	48611-
CHESTER	CHESTER	SC	29706-
TOLEDO	LUCAS	OH	43612-
DODSON	WINN	LA	71422-
BRECKSVILLE	CUYAHOGA	OH	44141-
ISLAND CITY	UNION	OR	97850-
ANDALUSIA	COVINGTON	AL	36421-
PASADENA	HARRIS	TX	77506-
EASTON	NORTHAMPTON	PA	18042-
COLLIERVILLE	FAYETTE	TN	38017-
PORTLAND	MULTNOMAH	OR	97210-
OLIVE BRANCH	DESOTO	MS	38654-
THREE RIVERS	HAMPDEN	MA	01080-
ALPHARETTA	FORSYTH	GA	30005-
FLORENCE	HAMPSHIRE	MA	01062-
MILLBURY	WORCESTER	MA	01527-
CANTON	NORFOLK	MA	02021-
HANOVER	PLYMOUTH	MA	02339-
NORTH KINGSTOWN	WASHINGTON	RI	02852-

45.427577	-122.757874
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32.749722	-91.173889
41.291321	-72.902638
39.67565	-85.68028
43.283056	-73.603611
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33.4629	-94.324756
33.906675	-80.331624
29.600902	-95.022533
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39.59983	-79.97148
40.458611	-74.3375
43.69142	-70.32809
29.759767	-94.907294
34.32599	-78.19946
43.586113	-84.109322
34.695556	-81.196667
41.729167	-83.521111
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41.29058	-81.62701
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34.1002	-84.21773
42.329885	-72.674449
42.18568	-71.74419
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4224	110000327414	325211		
4225	110000333817	325211	3864411	
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4227	110000336459	325211		
4228	110000346965	325211		
4229	110000349418	325211		
4230	110000355749	325211		
4231	110000356196	325211		
4232	110000356249	325211		
4233	110000356347	325211		
4234	110000359200	325211		
4235	110000360813	325211		
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4241	110000394804	325211		
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4254	110000474834	325211	15766211	
4255	110000475138	325211	13478011	
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4257	110000486894	325211		
4258	110000490861	325211		
4259	110000495312	325211		
4260	110000496268	325211		
4261	110000496598	325211		
4262	110000496847	325211		
4263	110000498319	325211		
4264	110000547953	325211		
4265	110000566414	325211		

NYLON CORP OF AMERICA
URASEAL INC
POLYURETHANE SPECIALTIES COIN C
ACRILEX INC
LUBRIZOL CORP
DUREZ NIAGARA
DART CONTAINER CORP OF PENNSYLVANIA
ITW ENGINEERED POLYMERS
ESSCHEM INC
ARCLIN USA LLC
ROHM & HAAS CHEMICALS LLC
POLYNT COMPOSITES USA INC
MARCHEM SOUTHEAST INC
ISOTEC INTERNATIONAL INC
ACCELLA POLYURETHANE SYSTEMS
SANCO INC
CHEMICAL RESEARCH\TECHNOLOGY (CR\T)
STEPAN CO
RESINALL MISSISSIPPI INC
INTERPOLYMER CORP
AXALTA COATING SYSTEMS LLC-TOLEDO PLANT
ROCHLING GLASTIC COMPOSITES
DUPONT ELECTRONIC POLYMERS
DSM COATINGS
AOC LLC
RECTICEL UREPP NA INC
EPIC RESINS
US POLYMERS - ACCUREZ LLC
ARNETTE POLYMERS LLC
MCP URETHANES
CERTAINTEED CORP
HEXION INC - ALEXANDRIA PLANT
HEXION INC - DIBOLL SITE
DIANAL AMERICA INC
METTON AMERICA INC
POLYNT COMPOSITES USA INC
AMERICAS STYRENICS LLC
HENRY CO ONTARIO FACILITY
SPECIALTY POLYMERS INC
KEMIRA WATER SOLUTIONS INC
KRYPTANE SYSTEMS
CYTEC OLEAN INC
PREFORMED LINE PRODUCTS
BASF CORP
MYCONE DENTAL SUPPLY CO INC CHERRY HILL NJ
PINNACLE POLYMERS
CVC SPECIALTY CHEMICALS INC

333 SUNDIAL AVE
1 WASHINGTON ST STE 204
624 SCHUYLER AVE
230 CULVER AVE
76 PORCUPINE RD
5000 PACKARD RD
60 E MAIN ST
130 COMMERCE DR
4000 COLUMBIA AVE
790 CORINTH RD
6101 ORR RD
71 BARNETT RD
400 N MAIN ST
201 LONGVIEW ST
100 ENTERPRISE DR
207 BROOKHOLLOW RD
1401 E HILL AVE
1 POLYMER WAY
102 DIXIE PINE RD
7501 DISTRIBUTION DR
1930 TREMAINSVILLE RD
4321 GLENRIDGE RD
1515 NICHOLAS RD
3110 W ST RD 28
2552 INDUSTRIAL DR
1653 ATLANTIC BLVD
600 INDUSTRIAL BLVD
300 EAST PRIMM STREET
8905 WOLLARD BLVD
826 E 4TH ST
3300 PETE MANENA RD
3901 SUGAR HOUSE RD
100 W BORDEN ST
9675 BAYPORT BLVD
2727 MILLER CUT-OFF RD
2801 LYNWOOD RD
305 CRENSHAW BLVD
2270 CASTLE HARBOR PL
2475 PROGRESS WAY
850 3RD AVE
740 S PIERCE AVE SUITE 5
1405 BUFFALO ST
1700 WOODHURST LN
200 IRIS DR
616 HOLLYWOOD AVE
ONE PINNACLE AVE
2980 RT 73 N

MANCHESTER	HILLSBOROUGH	NH	03103-
DOVER	STRAFFORD	NH	03820-
LYNDHURST	BERGEN	NJ	07071-
JERSEY CITY	HUDSON	NJ	07305-
PEDRICKTOWN	SALEM	NJ	08067-
NIAGARA FALLS	NIAGARA	NY	14304-
LEOLA	LANCASTER	PA	17540-
MONTGOMERYVILLE	MONTGOMERY	PA	18936-
LINWOOD	DELAWARE	PA	19061-
MONCURE	CHATHAM	NC	27559-
CHARLOTTE	MECKLENBURG	NC	28213-
FOREST PARK	CLAYTON	GA	30297-
ADAIRSVILLE	BARTOW	GA	30103-
CANTON	CHEROKEE	GA	30114-
CARTERSVILLE	BARTOW	GA	30120-
DALTON	WHITFIELD	GA	30721-
VALDOSTA	LOWNDES	GA	31601-
COLUMBUS	MUSCOGEE	GA	31907-
HATTIESBURG	FORREST	MS	39401-
LOUISVILLE	JEFFERSON	KY	40258-
TOLEDO	LUCAS	OH	43613-
SOUTH EUCLID	CUYAHOGA	OH	44121-
DAYTON	MONTGOMERY	OH	45417-
FRANKFORT	CLINTON	IN	46041-
VALPARAISO	PORTER	IN	46383-
AUBURN HILLS	OAKLAND	MI	48326-
PALMYRA	JEFFERSON	WI	53156-
SAINT LOUIS	ST LOUIS (CITY)	MO	63111-
RICHMOND	RAY	MO	64085-
PITTSBURG	CRAWFORD	KS	66762-
WESTLAKE	CALCASIEU PARISH	LA	70669-
ALEXANDRIA	RAPIDES PARISH	LA	71302-
DIBOLL	ANGELINA	TX	75941-
PASADENA	HARRIS	TX	77507-
LA PORTE	HARRIS	TX	77571-
LYNWOOD	LOS ANGELES	CA	90262-
TORRANCE	LOS ANGELES	CA	90503-
ONTARIO	SAN BERNARDINO	CA	91761-
WOODBURN	MARION	OR	97071-
LONGVIEW	COWLITZ	WA	98632-
LOUISVILLE	BOULDER	CO	80027-
OLEAN	CATTARAUGUS	NY	14760-
ALBEMARLE	STANLY	NC	28001-
SPARTA	WHITE	TN	38583-
CHERRY HILL	CAMDEN	NJ	08002-
GARYVILLE	ST JOHN THE BAPTIST	LA	70051-
MAPLE SHADE	BURLINGTON	NJ	08052-

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42.87999	-88.60273
38.54362	-90.25832
39.24901	-93.94675
37.41102	-94.6923
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31.197201	-94.782712
29.614166	-95.057777
29.726066	-95.079584
33.92593	-118.2221
33.84641	-118.32878
34.03228	-117.6167
45.155101	-122.833827
46.128339	-122.923536
39.95808	-105.12146
42.08559	-78.44623
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35.91524	-85.4861
39.935667	-75.039722
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39.959179	-74.987685

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4312	110033623835	325211		
4314	110038390666	325211		
4315	110038895283	325211		
4316	110039494188	325211		

SPECIALTY POLYMERS INC
BASF
INTERPLASTIC CORP
PLASTICS ENGINEERING CO
ACCELLA POLYURETHANE SYSTEMS
BASF HOUSTON POLYURETHANE
FLINT HILLS RESOURCES LONGVIEW LLC
NIPPON CARBIDE INDUSTRIES
DYMAX OLIGOMERS & COATINGS
NEUTRON PRODUCTS INC
MITSUBISHI CHEMICAL PERFORMANCE POLYMERS INC
ASK CHEMICALS LP
DIC IMAGING PRODUCTS USA LLC
RESINALL CORP
STYROLUTION AMERICA LLC
LAWTER INC
SHINTECH LOUISIANA LLC - ADDIS PLANT A
CYTEC ENGINEERED MATERIALS INC
CONVENIENCE PRODUCTS
POLYMER CHEMISTRY INNOVATIONS INC
AMERON INTERNATIONAL (LINING GROUP)
DUREZ CORP
KURARAY AMERICA INC SEPTON BU
INTERPLASTIC CORP
MAVERICK CORP
SOLVAY SPECIALTY POLYMERS USA LLC
HUNTSMAN POLYURETHANES
ASHLAND PERFORMANCE MATERIALS
IST (USA) CORP
STOCKMEIER URETHANES USA INC
DOW CHEMICAL CO
THERMO FISHER SCIENTIFIC
RAZOR COMPOSITES
LUBRIZOL ADVANCED MATERIALS INC
BJB ENTERPRISES INC
DOW CHEMICAL CO
LG HAUSYS AMERICA INC
ENDURO COMPOSITES INC-HOUSTON CENTRAL GREEN FACILITY
ACCELLA POLYURETHANE SYSTEMS LLC
ELASTOMER SPECIALTIES INC
SILPAK INC
GOPHER PLASTICS
SUN POLYMERS INTERNATIONAL INC
SDC TECHNOLOGIES INC
ONA POLYMERS LLC
HEXCEL CORP
GREAT LAKES POLYMER TECHNOLOGIES LLC

869 OLD RICHBURG RD
106 S MAIN
5019 HUNT ST
2732 N 15TH ST
140 SHELDON RD
1703 CROSSPOINT AVE
118 HUNTSMAN WAY
1250 PERIMETER RD
51 GREENWOODS RD
22301 MOUNT EPHRAIM RD
24060 HOOVER RD
2191 W 110TH ST
7335 S 10TH ST
302 N WATER ST
950 NOVA CHEMICALS BLVD HWY 20 W
1202 E PARKER ST
9750 LOUISIANA HWY 1 S
501 W 3RD
307 INTEGRAM DR
4231 S FREMONT AVE
201 N BERRY ST
13717 US .RT 68 S
11414 CHOATE RD
12335 S VAN NESS AVE
11379 GROOMS RD
50 AKRON DR
5015 BARNARD MILL RD
5106 WHEELER AVE
250 CHEESEQUAKE RD
20 COLUMBIA BOULEVARD
1881 W OAK PKWY
2 PRESTON CT
1315 LAKE ST
207 LOWELL ST
14791 FRANKLIN AVE
901 E KANAKEE RIVER DR
310 LG DR SE
16602 CENTRAL GREEN BLVD
8530 MILLIKEN AVE.
2210 S HWY 69
470 E. BONITA AVE.
2202 MYERS RD
100 SUN POLYMERS DR
45 PARKER
2326 LONNECKER DR
31815 GREAT WESTERN DRIVE
100 FABPRO WAY

CHESTER	CHESTER	SC	29706-
MALCOM	POWESHIEK	IA	50157-
PRYOR	MAYES	OK	74361-
SHEBOYGAN	SHEBOYGAN	WI	53083-
BEREA	CUYAHOGA	OH	44017-
HOUSTON	HARRIS	TX	77054-
LONGVIEW	HARRISON	TX	75602-
GREENVILLE	GREENVILLE	SC	29605-
TORRINGTON	LITCHFIELD	CT	06790-
DICKERSON	MONTGOMERY	MD	20842-
WARREN	MACOMB	MI	48089-
CLEVELAND	CUYAHOGA	OH	44102-
OAK CREEK	MILWAUKEE	WI	53154-
SEVERN	NORTHAMPTON	NC	27877-
DECATUR	MORGAN	AL	35601-
BAXLEY	APPLING	GA	31513-
ADDIS	WEST BATON ROUGE PARISH	LA	70710-
WINONA	WINONA	MN	55987-
PACIFIC	FRANKLIN	MO	63069-
TUCSON	PIMA	AZ	85714-
BREA	ORANGE	CA	92821-
KENTON	HARDIN	OH	43326-
PASADENA	HARRIS	TX	77507-
HAWTHORNE	LOS ANGELES	CA	90250-
BLUE ASH	HAMILTON	OH	45242-
GREENVILLE	GREENVILLE	SC	29605-
RINGWOOD	MCHENRY	IL	60072-
FORT SMITH	SEBASTIAN	AR	72901-
PARLIN	MIDDLESEX	NJ	08859-
CLARKSBURG	HARRISON	WV	26301-
MARIETTA	COBB	GA	30062-
BEDFORD	MIDDLESEX	MA	01730-
BARABOO	SAUK	WI	53913-
WILMINGTON	MIDDLESEX	MA	01887-
TUSTIN	ORANGE	CA	92780-
WILMINGTON	WILL	IL	60481-
ADAIRSVILLE	GORDON	GA	30103-
HOUSTON	HARRIS	TX	77032-
RANCHO CUCAMONGA	SAN BERNARDINO	CA	91730-
WAGONER	WAGONER	OK	74467-
POMONA	LOS ANGELES	CA	91767-
ALBERT LEA	FREEBORN	MN	56007-
MOORESVILLE	MORGAN	IN	46158-
IRVINE	ORANGE	CA	92618-
GARLAND	DALLAS	TX	75041-
WINDSOR	WELD	CO	80550-
KINGMAN	KINGMAN	KS	67068-

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43.774167	-87.728889
41.38954	-81.84862
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32.433611	-94.711389
34.75676	-82.36087
41.86692	-73.08254
39.22109	-77.42034
42.47112	-83.006
41.4725	-81.761944
42.91176	-87.92715
36.51967	-77.18746
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31.771802	-82.331519
30.325882	-91.261732
44.05587	-91.6492
38.484711	-90.78529
32.17341	-110.95511
33.92191	-117.90682
40.620914	-83.622568
29.61945	-95.03932
33.92036	-118.31783
39.27336	-84.3666
34.739357	-82.384734
42.39019	-88.29749
35.336111	-94.428611
40.455649	-74.331474
39.28162	-80.29437
33.992563	-84.523875
42.482194	-71.264228
43.45041	-89.73149
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33.71458	-117.81104
41.317778	-88.136389
34.4251	-84.9227
29.96141	-95.37609
34.09876	-117.55582
35.935781	-95.39678
34.0962	-117.742756
43.62292	-93.354228
39.57	-86.36766
33.657368	-117.703597
32.891792	-96.673052
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37.64312	-98.10494

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4361	110000505588	325212		
4363	110001211929	325212		
4364	110002317403	325212		
4365	110007237533	325212		

POLYONE CORP
REXTAC LLC
LAPORTE TPU
DESIGNER MOLECULES INC
TRINSEO LLC-MI OPERATIONS
ANCHOR SEAL
ARKEMA COATING RESINS PLANT
POLYPLEX USA LLC
BRASKEM AMERICA INC SEADRIFT PLANT
ARKEMA COATING RESINS
WACKER CHEMICAL CORP POLYMERS DIV
NA INDUSTRIES INC
POLYNT COMPOSITES USA INC
GS POLYMERS, INC.
KUREHA PGA LLC
MIDWEST COMPOSITES LLC
CYTEC INDUSTRIES INC
PLANT MAINTENANCE SERVICES
MALLARD CREEK POLYMERS
KURARAY AMERICA INC
CHECKERS INDUSTRIAL SAFETY PRODUCTS
ITW ENGINEERED POLYMERS
AMERICAS STYRENICS LLC
HUNTSMAN ADVANCED MATERIALS AMERICAS INC
SANYO CHEMICAL & RESINS LLC
DUPONT VICTORIA PLANT
AMERICAS STYRENICS ALLYNS POINT PLANT
STYRON LLC ALLYN'S POINT
INEOS USA LLC
FLOWCRETE NA - SPRING
KURARAY AMERICA BAYPORT
INEOS POLYMERS
SOLVAY SPECIALTY POLYMERS USA
KASTALON INC
GOODYEAR TIRE & RUBBER CO
ELECTRI-GLASS INC
PARKER HANNIFIN CORP O-RING DIV
EXXONMOBIL CHEMICAL CO
GOODYEAR AKRON PLANT 5
GOODYEAR CHEMICAL R&D
NUSIL TECHNOLOGY LLC
OREGON RUBBER MILLS CO
OREGON RUBBER CO
LCY ELASTOMERS LP
SMOOTH-ON INC
NUSIL TECHNOLOGY (TEXAS DIVISION)
TOTAL PETROCHEMICALS & REFINING USA INC (TOTAL CRAY VALLEY)

4250 BELLS LN
2501 S GRANDVIEW
600 INDEPENDENCE PKWY
10080 WILLOW CREEK RD
1604 BUILDING
54 GREAT REPUBLIC DR
19206 HAWTHORNE BLVD
3001 MALLARD FOX DR NW
7501 N HWY 185 BUILDING 101
1533 KNOX
854 NORTH MAIN STREET
4631 OLD HWY 146 SUITE A
3712 N PARK DR
3687-B GRAPEVINE STREET
901 W DUPONT AVE
302 KREIN AVE
3115 MILLER RD
95 SOUTHBELT IND US TRIAL DR
2800 MOREHEAD RD
12342 STRANG RD
640 COMPTON STREET
12055 CUTTEN ROAD
925 COUNTY RD 1A 4563WMRCSS925CU
555 HUNTSMAN RD
STATE RT 837 PO BOX 567
2697 OLD BLOOMINGTON RD N
1761 RT 12
1761 RT 12
356 THREE RIVERS PKWY
616 SPRING HILL DR
13100 BAY AREA BLVD
1230 INDEPENDENCE PKWY S
SPUR 119E
4100 W 124TH PL
11241 INTERSTATE HWY 10
63 COMPASS DR
104 HARTMANN DR
604 CHEMSTRAND RD
1452 E ARCHWOOD AVE
1485 E ARCHWOOD AVE
1150 MARK AVE
1985 SW AIRPORT AVE
3595 W 1ST AVE
4803 DECKER DR
1 WILLOW LN
6125 W CAMPUS CIR DR
569 24 1/4 RD

LOUISVILLE	JEFFERSON	KY	40211-
ODESSA	ECTOR	TX	79766-
LAPORTE	HARRIS	TX	77571-
SAN DIEGO	SAN DIEGO	CA	92131-
MIDLAND	MIDLAND	MI	48667-
GLOUCESTER	ESSEX	MA	01930-
TORRANCE	LOS ANGELES	CA	90503-
DECATUR	MORGAN	AL	35601-
SEADRIFT	CALHOUN	TX	77983-
NORTH KANSAS CITY	CLAY	MO	64116-
CALVERT CITY	MARSHALL	KY	42029-
SEABROOK	HARRIS	TX	77586-
CENTRALIA	LEWIS	WA	98531-
MIRA LOMA	RIVERSIDE	CA	91752-
BELLE	KANAWHA	WV	25015-
WAPAKONETA	AUGLAIZE	OH	45895-
KALAMAZOO	KALAMAZOO	MI	49001-
HOUSTON	HARRIS	TX	77047-
CHARLOTTE	MECKLENBURG	NC	28262-
LAPORTE	HARRIS	TX	77571-
BROOMFIELD	BROOMFIELD	CO	80020-
HOUSTON	HARRIS	TX	77066-
IRONTON	LAWRENCE	OH	45638-
MC INTOSH	WASHINGTON	AL	36553-
WEST ELIZABETH	ALLEGHENY	PA	15088-
VICTORIA	VICTORIA	TX	77905-
GALES FERRY	NEW LONDON	CT	06335-
GALES FERRY	NEW LONDON	CT	06335-
ADDYSTON	HAMILTON	OH	45001-
SPRING	MONTGOMERY	TX	77386-
PASADENA	HARRIS	TX	77507-
LA PORTE	HARRIS	TX	77571-
BORGER	HUTCHINSON	TX	79008-
ALSIP	COOK	IL	60803-
BEAUMONT	JEFFERSON	TX	77705-
JACKSON	MADISON	TN	38301-
LEBANON	WILSON	TN	37087-
CANTONMENT	ESCAMBIA	FL	32533-
AKRON	SUMMIT	OH	44306-
AKRON	SUMMIT	OH	44306-
CARPINTERIA	SANTA BARBARA	CA	93013-
CORVALLIS	BENTON	OR	97333-
EUGENE	LANE	OR	97402-
BAYTOWN	HARRIS	TX	77520-
EAST TEXAS	LEHIGH	PA	18046-
IRVING	DALLAS	TX	75063-
GRAND JUNCTION	MESA	CO	81505-

38.22196	-85.82975
31.82607	-102.324782
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29.646324	-95.04681
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41.66698	-87.72104
29.981247	-94.214028
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36.21732	-86.32041
30.594892	-87.251933
41.047769	-81.475089
41.04794	-81.47387
34.38894	-119.48532
44.50798	-123.28412
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4375	110067041089	325220		
4376	110056955521	325311 325180		
4377	110069332074	325311 325312		
4378	110000402010	325311		
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4380	110000428369	325311	8086511	
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4406	110000414506	325314		
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4408	110000449881	325314		
4409	110000482139	325314		
4410	110000507871	325314		
4411	110000588837	325314		
4412	110000589587	325314		
4413	110000765556	325314		
4414	110000852863	325314		

WAYNE COUNTY RUBBER INC
EXXONMOBIL CHEMICAL CO
MOLDED DIMENSIONS
TOWNLEY ENGINEERING & MANUFACTURING CO
DENKA PERFORMANCE ELASTOMER LLC
MITSUBISHI RAYON CARBON FIBER & COMPOSITES INC
PRINCE ENERGY LLC
SHAKESPEARE CONDUCTIVE FIBERS LLC
PCI NITROGEN LLC
KUGLER
SPAWN MATE INC
ANDERSONS INC
BASIN ELECTRIC ANTELOPE VALLEY STATION
J R SIMPLOT CO
KOCH FERTILIZER ENID LLC
THE ANDERSONS UPPER SANDUSKY TERMINAL
CHS MCPHERSON REFINERY
APACHE NITROGEN PRODUCTS INC
KUGLER CO FERTILIZER PLANT
KOCH FERTILIZER DODGE CITY LLC
MOSAIC PHOSPHATES CO FAUSTINA PLANT
HOCKING INTERNATIONAL LABORATORIES LLC
AGRIUM US INC
TESSENDERLO KERLEY INC WYNNEWOOD PLANT
ULYSSES DEALER FERTILIZER PLANT
PCS PHOSPHATE WHITE SPRINGS
MOSAIC FERTILIZER LLC-RIVERVIEW
FRIT INDUSTRIES
TURF CARE SUPPLY-HATFIELD PLANT
VOLUNTARY PURCHASING GROUPS INC
TURF CARE SUPPLY CORP
TURF CARE SUPPLY CORP
JR PETERS INC
EVERRIS NA INC
HOWARD FERTILIZER & CHEMICAL CO INC
DIAMOND R FERTILIZER CO INC
DIAMOND R FERTILIZER CO INC
NACHURS ALPINE SOLUTIONS
NACHURS ALPINE SOLUTIONS
HJE - A CENTRAL GARDEN & PET CO
NACHURS ALPINE SOLUTIONS
WILBUR-ELLIS CO RNA
KUGLER OIL CO
CHEMICAL DYNAMICS INC
PROSOL INC
HOWARD FERTILIZER & CHEMICAL CO INC
PAN AMERICAN FERTILIZER

1205 E BOWMAN ST
388 SOUTH MAIN STREET
701 SUNSET RD
10551 SE 110TH ST RD
560 HIGHWAY 44
5900 88TH ST
7707 WALLISVILLE RD
1451 SAND HILL RD
2001 JACKSON RD
1650 CULVERT STREET
2049 INDIANA AVE
101 AGRICO LN
294 COUNTY 15
12688 S COLORADO AVE
1619 S 78TH 5 MILES E OF ENID ON HWY 412
9841 COUNTY HIGHWAY 49
2000 S MAIN ST
1436 S APACHE POWDER RD
71748 RAILROAD ST
11559 US HWY 50
9959 HWY LA 18
171B GENE STEWART CT
566 COUNTY HWY 406
307 WEST SOUTH STREET
795 SOUTH ROAD H
CR 137 15843 SE 78 ST
8813 S US HWY 41
156 FRIT DR
59 DWIGHT ST
230 FM 87
422 WEBSTER TURN DR
100 PICOMA RD
6656 GRANT WAY
7200 INVESTMENT DR
8306 S ORANGE AVE
321 N HENNIS RD
710 NE 5TH AVE
421 LEADER ST
1705 N BROADWAY ST
1301 INDUSTRIAL DR
4200 GEIGY ACCESS RD
22312 RAILROAD AVE
20313 RIVERSIDE DR BOX 631
4206 B US INESS LA.
1792 JODIE PARKER RD
7205 E HWY 50
PR 133 KM 1.9

WOOSTER	WAYNE	OH	44691-
AKRON	SUMMIT	OH	44311-
PORT WASHINGTON	OZAUKEE	WI	53074-
CANDLER	MARION	FL	32111-
LA PLACE	ST JOHN THE BAPTIST PARIS	LA	70068-
SACRAMENTO	SACRAMENTO	CA	95828-
HOUSTON	HARRIS	TX	77020-
ENKA	BUNCOMBE	NC	28728-
PASADENA	HARRIS	TX	77506-
RAPID CITY	PENNINGTON	SD	57701-
NEW ALBANY	FLOYD	IN	47150-
SEYMOUR	JACKSON	IN	47274-
BEULAH	MERCER	ND	58523-9475
HELM	FRESNO	CA	93627-
ENID	GARFIELD	OK	73701-
UPPER SANDUSKY	WYANDOT	OH	43351-
MCPHERSON	MCPHERSON	KS	67460-
SAINT DAVID	COCHISE	AZ	85630-
CULBERTSON	HITCHCOCK	NE	69024-
DODGE CITY	FORD	KS	67801-
SAINT JAMES	ST JAMES PARISH	LA	70086-
SYLACAUGA	TALLADEGA	AL	35151-
MARSTON	NEW MADRID	MO	63866-
WYNNEWOOD	GARVIN	OK	73098-
ULYSSES	GRANT	KS	67880-
WHITE SPRINGS	HAMILTON	FL	32096-
RIVERVIEW	HILLSBOROUGH	FL	33578-
WALNUT RIDGE	LAWRENCE	AR	72476-
HATFIELD	HAMPSHIRE	MA	01038-
BONHAM	FANNIN	TX	75418-
SEBRING	HIGHLANDS	FL	33870-
MARTINS FERRY	BELMONT	OH	43935-
ALLENTOWN	LEHIGH	PA	18106-
NORTH CHARLESTON	CHARLESTON	SC	29418-
ORLANDO	ORANGE	FL	32809-
WINTER GARDEN	ORANGE	FL	34787-
OKEECHOBEE	OKEECHOBEE	FL	34972-
MARION	MARION	OH	43302-
RED OAK	MONTGOMERY	IA	51566-
NEOSHO	NEWTON	MO	64850-
SAINT GABRIEL	IBERVILLE PARISH	LA	70776-
SAN JOAQUIN	FRESNO	CA	93660-
STERLING	LOGAN	CO	80751-
PLANT CITY	HILLSBOROUGH	FL	33566-
OZARK	DALE	AL	36360-
GROVELAND	LAKE	FL	34736-
GUANICA	GUANICA	PR	00653-

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38.347278	-97.673846
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4458	110000361279	325320		
4459	110000374014	325320		
4460	110000374023	325320		
4461	110000375790	325320		

ACTAGRO LLC
CAMERON CHEMICAL INC
POOLE CHEMICAL CO INC
GROW MORE, INC.
PLANT FOOD CO INC
EAU CLAIRE CO-OPERATIVE OIL CO
CROMARTIE AGRICULTURAL CHEMICALS INC
GENERAL HYDROPONICS
BIO HUMA NETICS-GILBERT FACILITY
HARRELLS INC
ASB GREENWORLD INC
HARRELLS INC
WILBUR-ELLIS CO DEVINE
BAICOR
KOCH AGRONOMIC SERVICES LLC
KNOX FERTILIZER CO INC
GROW MORE, INC.
ENCAP LLC
BUDDY'S PLANT PLUS CORP
GAVILON FERTILIZER LLC
BIO HUMA NETICS INC
WEDGWORTH'S INC
SCOTTS CO
MICROSOURCE LLC
AGRIUM US INC
FLORIKAN ESA LLC
CYTOZYME LABORATORIES INC
HOWARD FERTILIZER & CHEMICAL CO INC
GENERAL HYDROPONICS
HOCKING INTERNATIONAL LABS LLC
TWIN STATE INC
KOCH AGRONOMIC SERVICES LLC
GENERAL HYDROPONICS
FLORIKAN ESA LLC
BAYER CROPSCIENCE LP
GRO TEC INC
WILLERT HOME PRODUCTS
CJB INDUSTRIES INC CS PLANT
CJB INDUSTRIES INC GH PLANT
FMC CORP MIDDLEPORT PLANT
CONTRACT PACKAGING INC
HELENA INDUSTRIES INC
BOLD FORMULATORS LLC TIFTON PLANT
TRIEST AG GROUP INC
IBC MANUFACTURING CO
DREXEL CHEMICAL CO
PLATTE CHEMICAL CO

1300 RICHARD PREWITT DR
830 OLD DILL RD.
110 N 1ST ST
15600 NEW CENTURY BLVD
38 HIGHTSTOWN-CRANBURY STATION
4970 KANE RD
1319 US 82 W
3789 VINE HILL RD
1331 W HO US TON AVE
720 KRAFT RD
496 AIRPORT ROAD
151 STEWART BLVD
265 INTERSTATE HWY 35 S
1895 N 600 W
660 THIRD AVE
2660 E 100 S
18800 SUSANA RD
3921 ALGOMA RD
2022 NORTH BROADWAY
461 HAINING ROAD
201 S ROOSEVELT AVE
28033 US HWY 27
563 S CROWN HILL RD
7632 HWY 101
1 COMMERCE ST
1579 BARBER RD
2700 S 600 W
600 W HWY 70
2877 GIFFEN AVE
3653 MIA BRAE DR
2206 HWY 927
1413 W EDWARDS ST
10612 APPLE HARVEST DR
2404 COMMERCE CT
PO BOX 1005
635 MADISON RD
4044 PARK AVE
2114 CYPRESS ST
701 GIL HARBIN INDUSTRIAL BLVD.
100 NIAGARA ST
13100 INDEPENDENCE DR
434 FENN RD
7745 MAGNOLIA IND US TRIAL BLVD
900 GOLDEN RD
416 E BROOKS RD
2489 PENNSYLVANNIA ST
917 PLATTE RD

OSCEOLA	MISSISSIPPI	AR	72370-
SUFFOLK	SUFFOLK (CITY)	VA	23434-
TEXLINE	DALLAM	TX	79087-
GARDENA	LOS ANGELES	CA	90248-
CRANBURY	MIDDLESEX	NJ	08512-
EAU CLAIRE	EAU CLAIRE	WI	54703-
LEESBURG	LEE	GA	31763-
SEBASTOPOL	SONOMA	CA	95472-
GILBERT	MARICOPA	AZ	85233-
LAKELAND	POLK	FL	33815-
MATTAPONI	KING AND QUEEN	VA	23110-
SYLACAUGA	TALLADEGA	AL	35151-
DEVINE	MEDINA	TX	78016-
LOGAN	CACHE	UT	84321-
SYLACAUGA	TALLADEGA	AL	35150-
KNOX	STARKE	IN	46534-
EAST RANCHO DOMINGUEZ	LOS ANGELES	CA	90221-
GREEN BAY	BROWN	WI	54311-
BALLINGER	RUNNELS	TX	76821-
VICKSBURG	WARREN	MS	39183-
CHANDLER	MARICOPA	AZ	85226-
MOORE HAVEN	GLADES	FL	33471-
ORRVILLE	WAYNE	OH	44667-
SHAKOPEE	SCOTT	MN	55379-
FLORENCE	LAUDERDALE	AL	35630-
SARASOTA	SARASOTA	FL	34240-
SALT LAKE CITY	SALT LAKE	UT	84115-
LAKE PLACID	HIGHLANDS	FL	33852-
SANTA ROSA	SONOMA	CA	95407-
YORK	YORK	PA	17406-
DURANT	CEDAR	IA	52747-
SYLACAUGA	TALLADEGA	AL	35150-
MARTINSBURG	BERKELEY	WV	25403-
WAUCHULA	HARDEE	FL	33834-
INSTITUTE	KANAWHA	WV	25112-
EATONTON	PUTNAM	GA	31024-
SAINT LOUIS	ST LOUIS (CITY)	MO	63110-
VALDOSTA	LOWNDES	GA	31601-
VALDOSTA	LOWNDES	GA	31601-
MIDDLEPORT	NIAGARA	NY	14105-
COVINGTON	NEWTON	GA	30014-
CORDELE	CRISP	GA	31015-
TIFTON	TIFT	GA	31794-
TIFTON	TIFT	GA	31794-
MEMPHIS	SHELBY	TN	38109-
MEMPHIS	SHELBY	TN	38109-
GREENVILLE	WASHINGTON	MS	38704-

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37.52795	-76.7631
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44.5404	-87.8849
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33.30024	-111.95099
26.803642	-81.082417
40.831002	-81.784877
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40.71265	-111.90694
27.207928	-81.340172
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41.60254	-90.93825
33.170801	-86.269809
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38.383113	-81.777205
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38.62139	-90.24971
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30.8031	-83.28157
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33.416667	-91

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4502	110015767419	325320		
4503	110017770624	325320		
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4506	110024523443	325320		
4507	110024966946	325320		
4508	110031019403	325320		
4509	110031055596	325320		

ODOM INDUSTRIES INC
ARCH WOOD PROTECTION INC
CHEM TECH LTD
HELENA INDUSTRIES INC
BELL LABORATORIES INC
HACCO INC
PBI/GORDON CORP
RSA MICROTECH LLC
SYNGENTA CROP PROTECTION LLC-OMAHA PLANT
MERCK ANIMAL HEALTH
HELENA INDUSTRIES INC
SCHIRM USA INC
BAYER CROPSCIENCE
TESSENDERLO KERLEY INC
AMVAC CHEMICAL
GOWAN MILLING LLC
KRONOS MICRONUTRIENTS LP
WILLERT HOME PRODUCTS
PBI/GORDON CORP - JAYHAWK FACILITY
BOLD FORMULATORS OCILLA PLANT
KELLY PRODUCTS INC
A TO Z DRYING INC
CERTIS USA
DREXEL CHEMICAL CO
THE SCOTTS CO
ODOM INDUSTRIES INC
TRIEST AG GROUP INC
SEPRO RESEARCH & TECHNOLOGY CAMPUS
DREXEL CHEMICAL CO
BASF CORP
DUPONT AGRICULTURAL CARIBE INDUSTRIES LTD
CONTROL SOLUTIONS INC
LANXESS CORPORATION, NEVILLE ISLAND
DOUGLAS PRODUCTS & PACKAGING CO
OMNIUM
DUPONT VALDOSTA MANUFACTURING
TIGER SUL
ANITOX CORP
AGRAFORM
AMVAC CHEMICAL CO
BASF PEST CONTROL SOLUTIONS
HPI PRODUCTS INC
DECCO US POSTHARVEST INC
DREXEL CHEMICAL GW WAREHOUSE FACILITY
OMNIUM BLYTHEVILLE
DREXEL CHEMICAL
KELLY PACKAGING INC

100 CHESTNUT ST
2852 RAYSTONE DR
1006 B US INESS HWY 5
3525 VANDALIA RD
3699 KINSMAN BLVD
110 HOPKINS RD
300 S 3RD ST
510 TRAIL ST
4111 GIBSON RD
2667 W DUAL ST
101 MARTIN LUTHER KING DR
2801 OAK GROVE RD
3310 PASADENA BLVD
480 S 280W
410 SIMPKIN LN
12300 E COUNTY 8TH ST
213 W MOXEE AVE
100 21ST ST
ALT. 69 HWY & MILITARY RD
364 FITZGERALD HWY
14481 LOCHRIDGE BLVD
1000 WALLACE RD
720 5TH ST
TUNICA INDUSTRIAL PARK PO BOX 1096
550 GULF LINE RD
800 ODOM INDUSTRIES RD
1101 IND US TRIAL BLVD
16013 WATSON SEED FARM ROAD
HWY 280 E CAPE RD
14284 HWY 41 N
P.R. RD NO. 686, KM. 2.3
5903 GENOA RED BLUFF RD
3499 GRAND AVE
1500 E OLD 210 HWY
1280 IMPERIAL RD
2509 ROCKY FORD RD
29 BYRNE DR
1055 PROGRESS CIR
133 E KRA US S ST
12650 HWY 43 N
3568 TREE CT IND US TRIAL BLVD
222 SYLVANIE ST
1713 S CALIFORNIA AVE
3001 EAST 13TH AVE.
400 TERRA RD
2400 PIER ST
13100 INDEPENDENCE DR

PACHUTA	CLARKE	MS	39347-
VALPARAISO	PORTER	IN	46383-
PLEASANTVILLE	MARION	IA	50225-
DES MOINES	POLK	IA	50317-
MADISON	DANE	WI	53704-
RANDOLPH	DODGE	WI	53956-
KANSAS CITY	WYANDOTTE	KS	66118-
DODGE CITY	FORD	KS	67801-
OMAHA	DOUGLAS	NE	68107-
BATON ROUGE	EAST BATON ROUGE	LA	70814-
WEST HELENA	PHILLIPS	AR	72390-
ENNIS	ELLIS	TX	75119-
PASADENA	HARRIS	TX	77503-
BURLEY	CASSIA	ID	83318-
MARSING	OWYHEE	ID	83639-
YUMA	YUMA	AZ	85365-
MOXEE	YAKIMA	WA	98936-
KENOVA	WAYNE	WV	25530-
CRESTLINE	CHEROKEE	KS	66728-
OCILLA	IRWIN	GA	31774-
COVINGTON	NEWTON	GA	30014-
OSAGE	MITCHELL	IA	50461-
WASCO	KERN	CA	93280-
TUNICA	TUNICA	MS	38676-
PEARL	RANKIN	MS	39208-
WAYNESBORO	WAYNE	MS	39367-
GREENVILLE	PITT	NC	27834-
WHITAKERS	NASH	NC	27891-
CORDELE	CRISP	GA	31015-
SPARKS	COOK	GA	31647-
MANATI	MANATI	PR	00674-
PASADENA	HARRIS	TX	77507-
PITTSBURGH	ALLEGHENY	PA	15225-
LIBERTY	CLAY	MO	64068-
HAMPTON	FRANKLIN	IA	50441-
VALDOSTA	LOWNDES	GA	31601-
ATMORE	ESCAMBIA	AL	36502-
LAWRENCEVILLE	GWINNETT	GA	30043-
SAINT LOUIS	ST LOUIS (CITY)	MO	63111-
AXIS	MOBILE	AL	36505-
SAINT LOUIS	ST LOUIS	MO	63122-
SAINT JOSEPH	BUCHANAN	MO	64501-
MONROVIA	LOS ANGELES	CA	91016-
CORDELE	CRISP	GA	31015-
BLYTHEVILLE	MISSISSIPPI	AR	72315-
MEMPHIS	SHELBY	TN	38109-
COVINGTON	NEWTON	GA	30014-

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31.62636	-83.24965
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43.27255	-92.80694
35.59687	-119.33332
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42.72891	-93.22767
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4523	110000488026	325411 325199 325180		
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4554	110000365989	325412		
4555	110000394485	325412		
4556	110000406445	325412		
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TRIEST AG GROUP INC
RITEPACK INC
WELLMARK INTERNATIONAL (DBA CENTRAL LIFE SCIENCES)
MACDERMID AGRICULTURAL SOUTIONS
SUTERRA LLC
AMVAC CHEMICAL CORP
JACOBSON PACKAGING CO LC
VALENT BIOSCIENCES CORP
NUFARM AMERICAS INC - ALSIP
LOVELAND PRODUCTS INC-BILLINGS (FORMERLY TRANSBAS)
CJB INDUSTRIES INC CW PLANT
DREXEL CHEMICAL SKAGG'S FACILITY
EXACTO INC
W R GRACE & CO-CONN
LIFECORE BIOMEDICAL LLC
SOLGAR VITAMIN & HERB
PHARMACIA HEPAR LLC
PHARMA TECH INDUSTRIES
TAPI PUERTO RICO HUMACAO SITE
SAFC INC
CEDARBURG PHARMACEUTICALS INC
NATURALIFE ECOVITE LABS INC.
LONZA BIOLOGICS INC
IONIS PHARMACEUTICALS INC
AMPAC FINE CHEMICALS LLC
BIOSPECTRA INC
AMPAC FINE CHEMICALS TEXAS LLC
SAFC INC
CODY LABORATORIES INC
AMWAY NUTRILITE
CARGILL-VITAMIN E
DOW CORNING CORP HEALTHCARE INDUSTRIES MATERIALS SITE
LACAMAS LABORATORIES INC
BAYER HEALTHCARE LLC
SHEFFIELD PHARMACEUTICALS LLC
JOHNSON MATTHEY PHARMA SERVICES
JOHNSON MATTHEY PHARMA SERVICES
ALCAMI CORP (FORMERLY CAMBRIDGE MAJOR LABORATORIES)
GENZYME CORP
NOVARTIS PHARMACEUTICALS CORP
FOUGERA PHARMACEUTICALS INC
UNITHER MANUFACTURING LLC
ROCHE CAROLINA INC
AVANTI POLAR LIPIDS INC
ADARE PHARMACEUTICALS INC
ASH STEVENS INC
RELIABLE BIOPHARMACEUTICAL LLC

7610 US HWY 41 N
502 S 15TH ST
12111 FORD RD
2320 LAKECREST DR
20950 NE TALUS PLACE
3150 HWY JJ
3060 S PARK BLVD
2142 350TH ST
11901 SOUTH AUSTIN AVENUE
1525 LOCKWOOD RD
2224 CYPRESS ST
2591 HARBOR
200 OLD FACTORY RD
1290 INDUSTRIAL WAY SW
3515 LYMAN BLVD
500 WILLOW TREE RD
160 INDUSTRIAL DRIVE
1310 STYLEMASTER DR
ST-C HUMACAO INDUSTRIAL PKWY HWY 3 KM76.3
645 SCIENCE DR.
870 BADGER CIR
20433 EARL ST
101 INTERNATIONAL DR
2282 FARADAY AVENUE
HWY 50 & HAZEL RD
RR2 BOX 2129G, ROCKDALE LANE
914 S 16TH ST
1101 KETTLE MORAINE TRAIL
601 YELLOWSTONE AVE
1333 PORT IND US TRIAL PKWY NW
1194 720TH AVE
1635 N GLEANER RD
3625 N SUTTLE RD
4207 MICHIGAN AVE RD NE
170 BROAD ST
70 FLAGSHIP DR
25 PATTON RD
W132 N10550 GRANT DR
500 SOLDIERS FIELD RD
59 ROUTE 10
60 BAYLIS RD
755 JEFFERSON RD
6173 E OLD MARION HWY BUILDING 806
700 INDUSTRIAL PARK DR
845 CENTER DR
18655 KRAUSE ST
1945 WALTON RD

PALMETTO	MANATEE	FL	34221-
WATHENA	DONIPHAN	KS	66090-
DALLAS	DALLAS	TX	75234-
PEKIN	TAZEWELL	IL	61554-
BEND	DESCHUTES	OR	97701-
PALMYRA	MARION	MO	63461-
ELLENWOOD	CLAYTON	GA	30294-
OSAGE	MITCHELL	IA	50461-
ALSIP	COOK	IL	60803-
BILLINGS	YELLOWSTONE	MT	59101-
VALDOSTA	LOWNDES	GA	31601-
MEMPHIS	SHELBY	TN	38106-1412
SHARON	WALWORTH	WI	53585-
ALBANY	LINN	OR	97322-
CHASKA	CARVER	MN	55318-
LEONIA	BERGEN	NJ	07605-
FRANKLIN	WARREN	OH	45005-
UNION	FRANKLIN	MO	63084-
HUMACAO	HUMACAO	PR	00791-
MADISON	DANE	WI	53711-
GRAFTON	OZAUKEE	WI	53024-
TORRANCE	LOS ANGELES	CA	90503-
PORTSMOUTH	ROCKINGHAM	NH	03801-
CARLSBAD	SAN DIEGO	CA	92008-
RANCHO CORDOVA	SACRAMENTO	CA	95670-
STROUDSBURG	MONROE	PA	18360-
LA PORTE	HARRIS	TX	77571-
VERONA	DANE	WI	53593-
CODY	PARK	WY	82414-
QUINCY	GRANT	WA	98848-
EDDYVILLE	MONROE	IA	52553-
HEMLOCK	SAGINAW	MI	48626-
PORTLAND	MULTNOMAH	OR	97217-
CLEVELAND	BRADLEY	TN	37323-
NEW LONDON	NEW LONDON	CT	06320-
NORTH ANDOVER	ESSEX	MA	01845-
DEVENS	WORCESTER	MA	01434-
GERMANTOWN	WASHINGTON	WI	53022-
ALLSTON	SUFFOLK	MA	02134-
EAST HANOVER	MORRIS	NJ	07936-
MELVILLE	SUFFOLK	NY	11747-
ROCHESTER	MONROE	NY	14623-
FLORENCE	FLORENCE	SC	29506-
ALABASTER	SHELBY	AL	35007-
VANDALIA	MONTGOMERY	OH	45377-
RIVERVIEW	WAYNE	MI	48193-
OVERLAND	ST LOUIS	MO	63114-

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18.152222	-65.789444
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41.35892	-72.10524
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42.528806	-71.625768
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HOSPIRA INC-AUSTIN SITE
ZOETIS LLC
BACHEM AMERICAS INC
E R SQUIBB & SONS LLC
JANSSEN ORTHO LLC
CHATTEM INC PLANT 2
PERRIGO OF SOUTH CAROLINA INC
PATHEON
BIOGEN INC
PATHEON API MANUFACTURING INC
REXALL SUNDOWN INC
C S BIO CO
NEKTAR THERAPEUTICS
COLOPLAST MANUFACTURING US LLC-MANKATO
NITTO DENKO AVECIA
PATHEON PUERTO RICO INC
TAPI PUERTO RICO INC
ACTAVIS LABORATORIES UT INC
SIEMENS HEALTHCARE DIAGNOSTICS
BAYER ANIMAL HEALTH LLC
BACHEM AMERICAS INC
POLYPEPTIDE LABORATORIES SAN DIEGO
FENWAL INTERNATIONAL INC
SIGMA-TAU PHARMASOURCE INC
GENZYME BIOSURGERY
JOHNSON & JOHNSON CONSUMER INC
BAXTER HEALTHCARE CORP
ALERE SAN DIEGO
AMYLIN OHIO LLC
PACIRA PHARMACEUTICALS INC
NBTY INC
AVEVA DRUG DELIVERY SYSTEMS
LILLY DEL CARIBE INC PR06
NITTO DENKO AVECIA INC
EI LLC
ABBVIE LTD
POLYPEPTIDE LABORATORIES INC
SIEMENS HEALTHCARE DIAGNOSTICS INC
THERMO FISHER SCIENTIFIC MILWAUKEE LLC
BECKMAN COULTER
FISHER SCIENTIFIC INTERNATIONAL MTN DIAGNOSTICS PLANT
ROCHE MOLECULAR SYSTEMS INC
MERIDIAN BIOSCIENCE INC
APPLIED BIOSYSTEMS LLC
HOLOGIC INC
ORTHO-CLINICAL DIAGNOSTICS
STATLAB MEDICAL PRODUCTS (SLMP LLC)

3900 HOWARD LN
1301 IOWA AVE
3132 KASHIWA ST
RT 206 & PROVINCE LINE RD
STATE RD 2 KM 45.6 CAMPO ALEGRE
3350 BROAD ST
4615 DAIRY DR
101 TECHNOLOGY PL
250 BINNEY ST
309 DELAWARE ST
901 BROKEN SOUND PKWY NW
20 KELLY CT
1112 CHURCH ST
1940 COMMERCE DR
8560 READING RD
STATE RD 670 KM 2.7
RD #3 KM. 143.0 JOBOS WARD
575 577 579 CHIPETA WAY
333 CONEY ST
12707 SHAWNEE MISSION PKWY
1271 AVENIDA CHELSEA
9395 CABOT DR
RD 357 KM 0.8
6925 GUION RD
1125 PLEASANTVIEW TERRACE
5760 W 96TH ST
65 PITT STATION RD
9975 SUMMERS RIDGE RD
8814 TRADE PORT DR
10450 SCIENCE CENTER DR
105 ORVILLE DR
3250 COMMERCE PARKWAY
STATE RD 53 KM 82 JOBOS EXIT 83
155 FORTUNE BLVD
2865 N CANNON BLVD
RD NO2 KM 58.0 CRUCE DAVILA
365 MAPLE AVE
3400 MIDDLEBURY ST
2202 N BARTLETT AVE
2470 FARADAY AVE
8365 VALLEY PIKE
1080 US HWY 202 S
3471 RIVER HILLS DRIVE
6055 SUNOL BLVD
4 NAVIGATOR RD
1001 US RT 202
2090 COMMERCE DR

AUSTIN	TRAVIS	TX	78728-
LONGMONT	BOULDER	CO	80501-
TORRANCE	LOS ANGELES	CA	90505-
LAWRENCEVILLE	MERCER	NJ	08648-
MANATI	MANATI	PR	00674-
CHATTANOOGA	HAMILTON	TN	37409-
GREENVILLE	GREENVILLE	SC	29607-
FLORENCE	FLORENCE	SC	29501-
CAMBRIDGE	MIDDLESEX	MA	02142-
GREENVILLE	GREENVILLE	SC	29605-
BOCA RATON	PALM BEACH	FL	33487-
MENLO PARK	SAN MATEO	CA	94025-
HUNTSVILLE	MADISON	AL	35801-
NORTH MANKATO	NICOLLET	MN	56003-
CINCINNATI	HAMILTON	OH	45215-
MANATI	MANATI	PR	00674-
GUAYAMA	GUAYAMA	PR	00784-
SALT LAKE CITY	SALT LAKE	UT	84108-
EAST WALPOLE	NORFOLK	MA	02032-
SHAWNEE	JOHNSON	KS	66216-
VISTA	SAN DIEGO	CA	92081-
SAN DIEGO	SAN DIEGO	CA	92126-
MARICAO	MARICAO	PR	00606-
INDIANAPOLIS	MARION	IN	46268-
RIDGEFIELD	BERGEN	NJ	07657-
LOS ANGELES	LOS ANGELES	CA	90045-
MARION	MCDOWELL	NC	28752-
SAN DIEGO	SAN DIEGO	CA	92121-
WEST CHESTER	BUTLER	OH	45071-
SAN DIEGO	SAN DIEGO	CA	92121-
BOHEMIA	SUFFOLK	NY	11716-
MIRAMAR	BROWARD	FL	33025-
GUAYAMA	GUAYAMA	PR	00784-
MILFORD	WORCESTER	MA	01757-
KANNAPOLIS	CABARRUS	NC	28083-
BARCELONETA	BARCELONETA	PR	00617-
TORRANCE	LOS ANGELES	CA	90503-
ELKHART	ELKHART	IN	46516-
MILWAUKEE	MILWAUKEE	WI	53202-
CARLSBAD	SAN DIEGO	CA	92010-
MIDDLETOWN	FREDERICK	VA	22645-
BRANCHBURG	SOMERSET	NJ	08876-
CINCINNATI	HAMILTON	OH	45244-
PLEASANTON	ALAMEDA	CA	94566-
LONDONDERRY	ROCKINGHAM	NH	03053-
RARITAN	SOMERSET	NJ	08869-
MCKINNEY	COLLIN	TX	75069-

30.441529	-97.702326
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42.36779	-71.07418
34.76334	-82.36492
26.40045	-80.1054
37.47543	-122.14958
34.74515	-86.59686
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32.8923	-117.14405
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40.82722	-74.01594
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35.83411	-82.00156
32.89748	-117.1729
39.33457	-84.46834
32.89513	-117.23074
40.77447	-73.1017
25.978979	-80.282688
17.980235	-66.151058
42.15988	-71.50185
35.53433	-80.60726
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4648	110000316630	325510		
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4651	110000322945	325510		
4652	110000323258	325510		
4653	110000323310	325510		
4654	110000328789	325510		

ZOETIS LLC
BOEHRINGER INGELHEIM VETMEDICA INC - 5TH ST NW
INTERVET INC
INTERVET INC
ZOETIS LLC
ELANCO ANIMAL HEALTH
BOEHRINGER INGELHEIM VETMEDICA INC - N BELT CAMPUS
GENZYME FRAMINGHAM MANUFACTURING
BAXALTA US INC
IMMUNEX RHODE ISLAND CORP A SUBSIDIARY OF AMGEN INC
INTERVET INC (DBA MERCK ANIMAL HEALTH)
NOVOZYMES BIOLOGICALS INC
KEDRION BIOPHARMA INC
BAXALTA US INC - GA
NOVO NORDISK US BIO PRODUCTION INC
CFC INTERNATIONAL
CHEMMASTERS
LAKESIDE PLASTICS INC
ADVANCED POLYMER TECHNOLOGY
BASF CORP
CAMGER COATINGS SYSTEMS INC
STANCHEM INC
LANCO MANUFACTURING CORP
MAX CHEMICAL INC
PRC-DESOTO INTERNATIONAL INC
BLUE CUBE OPERATIONS LLC
RAHN USA CORP
HENKEL CORP
DELTA LABORATORIES INC
FREIBORNE INDUSTRIES INC
P&D COLOR CO INC
PYRAMID PLASTICS INC
BASF CORP
BASF CORP
GLASS COATINGS & CONCEPTS
KORE MART LTD
UNION SPECIALTIES INC
RUST-OLEUM
DUR-A-FLEX
CAAP CO INC
BYK USA INC
PORCELEN LTD CT LLC
KIRKER ENTERPRISES INC
ABSOLUTE COATINGS INC
MERCURY PAINT CORP
INDUSTRIAL FINISHING PRODUCTS
NATIONAL POLYMERS INC

601 W CORNH US KER HWY
800 5TH ST NW
35500 W 91ST ST
375 S LAKE ST
2000 ROCKFORD RD
1447 140TH ST
2621 N BELT HWY
NEW YORK AVE
1700 RANCHO CONEJO BLVD
40 TECHNOLOGY WAY
29160 INTERVET LN
420 KESLER MILL RD
155 DURYEA RD
505 BAXALTA PKWY
9 TECHNOLOGY DR
500 STATE ST
300 EDWARDS ST
450 W 33RD AVE
109 CONICA LN
801 DAYTON AVE
364 MAIN ST
401 BERLIN ST
URB APONTE # 5
URB. INDUSTRIAL SABANA LLANA, LA BRISA NO. 6
3330 W TOWN POINT DR SUITE F
125 GNS CT
1005 N COMMONS DRIVE
167 BATCHELDER RD
3710 W COUNTY RD 326
15 W SILVERDOME INDUSTRIAL PARK
999 GRANT ST
220 W 5TH ST
38403 CHERRY ST
6450 BRISTOL PIKE HWY
300 LAWTON AVE
HILL DR & W STATE ST
3 MALCOLM HOYT DR
113 OLIVE ST
95 GOODWIN ST
152 PEPE'S FARM RD
524 S CHERRY ST
129 LEEDER HILL DR
1 E 11TH ST
38 PORTMAN RD
4808 FARRAGUT RD
465 LOGAN ST
9 GUTTMAN AVE

LINCOLN	LANCASTER	NE	68521-
FORT DODGE	WEBSTER	IA	50501-
DE SOTO	JOHNSON	KS	66018-
WORTHINGTON	NOBLES	MN	56187-
CHARLES CITY	FLOYD	IA	50616-
LARCHWOOD	LYON	IA	51241-
SAINT JOSEPH	BUCHANAN	MO	64506-
FRAMINGHAM	MIDDLESEX	MA	01701-
THOUSAND OAKS	VENTURA	CA	91320-
WEST GREENWICH	KENT	RI	02817-
MILLSBORO	SUSSEX	DE	19966-
SALEM	ROANOKE	VA	24153-
MELVILLE	SUFFOLK	NY	11747-
SOCIAL CIRCLE	WALTON	GA	30025-
WEST LEBANON	GRAFTON	NH	03784-
CHICAGO HEIGHTS	COOK	IL	60411-
MADISON	LAKE	OH	44057-
OSHKOSH	WINNEBAGO	WI	54902-
HARMONY	BUTLER	PA	16037-
AMES	STORY	IA	50010-
NORFOLK	NORFOLK	MA	02056-
EAST BERLIN	HARTFORD	CT	06023-
SAN LORENZO	SAN LORENZO	PR	00754-
RIO PIEDRAS	SAN JUAN	PR	00924-
KENNESAW	COBB	GA	30144-
ROBERTA	CRAWFORD	GA	31078-
AURORA	DUPAGE	IL	60504-
SEABROOK	ROCKINGHAM	NH	03874-
OCALA	MARION	FL	34475-
PONTIAC	OAKLAND	MI	48342-
ATLANTA	FULTON	GA	30315-
HOPE	HEMPSTEAD	AR	71801-
NEWARK	ALAMEDA	CA	94560-
LEVITTOWN	BUCKS	PA	19057-
MONROE	BUTLER	OH	45050-
HAMBURG	BERKS	PA	19526-
NEWBURYPORT	ESSEX	MA	01950-
ATTLEBORO	BRISTOL	MA	02703-
EAST HARTFORD	HARTFORD	CT	06108-
MILFORD	NEW HAVEN	CT	06460-
WALLINGFORD	NEW HAVEN	CT	06492-
HAMDEN	NEW HAVEN	CT	06517-
PATERSON	PASSAIC	NJ	07524-
NEW ROCHELLE	WESTCHESTER	NY	10801-
BROOKLYN	KINGS	NY	11203-
BROOKLYN	KINGS	NY	11208-
CHARLEROI	WASHINGTON	PA	15022-

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42.88424	-70.88669
29.226208	-82.160632
42.63715	-83.25702
33.72707	-84.37668
33.66467	-93.59277
37.5242	-122.0169
40.124579	-74.838544
39.44566	-84.34626
40.551169	-75.994467
42.7964	-70.89044
41.937222	-71.289921
41.790297	-72.625348
41.23099	-73.01975
41.4425	-72.83477
41.34584	-72.9243
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PENN COLOR INC
AKZO NOBEL COATINGS
PPG INDUSTRIES ARCHITECTURAL FINISHES
MCCORMICK PAINT WORKS CO
MCCORMICK PAINT WORKS CO
DAVIS-FROST INC
RUSTOLEUM CORP
COLUMBIA PAINT CORP
ENNIS PAINT INC - HIGH POINT FACILITY
SHEBOYGAN PAINT CO
PPG INDUSTRIES INC
EVERLUBE PRODUCTS
ALCHEMIX CORP
PPG ARCHITECTURAL FINISHES INC
TEXTURED COATINGS OF AMERICA INC
SAFETY COATINGS INC
JOHN L ARMITAGE & CO
WARREN PAINT & COLOR CO
SHERWIN-WILLIAMS CO
MARCUS PAINT CO
COLOR CORP OF AMERICA
NPA COATINGS INC
DUDICK INC
FUSION CERAMICS INC
REFCOTEC INC
AMERICAN COLORS INC DISPERSION PLANT SANDUSKY OHIO
SUN CHEMICAL CORP AMELIA PLANT
SHERWIN-WILLIAMS CO
PPG INDUSTRIES INC
VANGUARD PAINTS & FINISHES INC
DAVIES IMPERIAL COATINGS INC
WORWAG COATINGS LLC NA
ITW ENGINEERED POLYMERS
ALCO PRODUCTS LLC
HELEN,INC DBA ENVIRONMENTAL COATINGS,INC
REPCOLITE PAINTS INC
NORTHERN COATINGS & CHEMICAL CO INC
KLINGER PAINT CO INC
HALLMAN LINDSAY PAINT
TMS MANUFACTURING
MID-STATES PAINT & CHEMICAL CO
ELPACO COATINGS CORP
CMP COATINGS INC
CROWN PAINT CO
H-I-S PAINT MANUFACTURING CO INC
ANCHOR PAINT MANUFACTURING CO INC
BENJAMIN MOORE & CO-DALLAS

2755 BERGEY RD
150 COLUMBIA AVE
1886 LYNNBURY WOODS RD
2355 LEWIS AVE
7202 MCCKINNEY CIR
3416 CANDLERS MOUNTAIN RD
7850 OHIO RIVER RD
641 JACKSON AVE
201 OLD THOMASVILLE RD
608 CANAL ST
875 PROGRESS CENTER AVE
100 COOPER CIR
2300 W POINT AVE
4261 W WHITE RD
2422 E 15TH ST
20180 SAFETY LN
545 NATIONAL DR
700 WEDGEWOOD AVE
404 E MALLORY AVE
235 E MARKET ST
1630 W HILL ST
11120 BEREA RD
1818 MILLER PKWY
160 SCIO RD SE
542 COLLINS BLVD
1110 EDGEWATER AVE
3922 BACH BUXTON RD
145 CALDWELL DR
19699 PROGRESS DR
1409 GREENE ST
1275 STATE ST
3420 KOSSUTH ST
2425 N LAPEER RD
580 ST JEAN ST
6450 HANNA LAKE AVE SE
473 W 17TH ST
705 6TH AVE
5555 WILLOW CREEK DR SW
1717 N BRISTOL
3555 W 123RD ST
9315 WATSON INDUSTRIAL PARK
1378 KINGSLAND AVE
1610 ENGINEERS RD
1801 W SHERIDAN
1700 W SHERIDAN
6707 E 14TH ST
700 W KEARNEY

HATFIELD	MONTGOMERY	PA	19440-
READING	BERKS	PA	19601-
DOVER	KENT	DE	19904-
ROCKVILLE	MONTGOMERY	MD	20851-
FREDERICK	FREDERICK	MD	21701-
LYNCHBURG	LYNCHBURG (CITY)	VA	24502-
LESAGE	CABELL	WV	25537-
HUNTINGTON	CABELL	WV	25704-
HIGH POINT	GUILFORD	NC	27260-
CEDARTOWN	POLK	GA	30125-
LAWRENCEVILLE	GWINNETT	GA	30043-
PEACHTREE CITY	FAYETTE	GA	30269-
COLLEGE PARK	FULTON	GA	30337-
OAKWOOD	HALL	GA	30566-
PANAMA CITY	BAY	FL	32405-
FOLEY	BALDWIN	AL	36535-
GALLATIN	SUMNER	TN	37066-
NASHVILLE	DAVIDSON	TN	37203-
MEMPHIS	SHELBY	TN	38109-
LOUISVILLE	JEFFERSON	KY	40202-
LOUISVILLE	JEFFERSON	KY	40210-
CLEVELAND	CUYAHOGA	OH	44102-
STREETSBORO	PORTAGE	OH	44241-
CARROLLTON	CARROLL	OH	44615-
ORRVILLE	WAYNE	OH	44667-
SANDUSKY	ERIE	OH	44870-
AMELIA	CLERMONT	OH	45102-
CINCINNATI	HAMILTON	OH	45216-
STRONGSVILLE	CUYAHOGA	OH	44149-
MARIETTA	WASHINGTON	OH	45750-
HAMMOND	LAKE	IN	46320-
LAFAYETTE	TIPPECANOE	IN	47905-
OXFORD	OAKLAND	MI	48371-
DETROIT	WAYNE	MI	48214-
CALEDONIA	KENT	MI	49316-
HOLLAND	OTTAWA	MI	49423-
MENOMINEE	MENOMINEE	MI	49858-
CEDAR RAPIDS	LINN	IA	52404-
SUN PRAIRIE	DANE	WI	53590-
ALSIP	COOK	IL	60803-
CRESTWOOD	ST LOUIS	MO	63126-
PAGEDALE	ST LOUIS	MO	63133-
BELLE CHASSE	PLAQUEMINES	LA	70037-
OKLAHOMA CITY	OKLAHOMA	OK	73106-
OKLAHOMA CITY	OKLAHOMA	OK	73106-
TULSA	TULSA	OK	74112-
MESQUITE	DALLAS	TX	75149-

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42.36286	-82.96788
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41.92429	-91.69043
43.2046	-89.21091
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38.56155	-90.37483
38.67752	-90.30394
29.85168	-90.02554
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4740	110000861782	325510		
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4743	110001128798	325510		
4744	110001135218	325510		
4745	110001236975	325510		
4746	110001293966	325510		
4747	110001675492	325510		
4748	110001887389	325510		
4749	110001976130	325510		

KELLY-MOORE PAINT CO INC
WR MEADOWS OF TEXAS
BASF CORP - HOUSTON EBN SITE
PPG ARCHITECTURAL COATINGS HOUSTON
TCI COATINGS INC
REXCEL COATINGS CORP
VALLEY PAINT MANUFACTURING
WR MEADOWS OF ARIZONA INC
TEXTURED COATINGS OF AMERICA INC
AMERICAN POLYMERS CORP DBA POLYCOAT PRODUCTS
PFI INC
SHERWIN-WILLIAMS CO
CARDINAL INDUSTRIAL FINISHES
ITW POLYMERS SEALANTS NA
BEHR PROCESS CORP - ALTON
PRC-DESOTO INTERNATIONAL INC
RODDA PAINT CO
IMPERIAL PAINT CO INC
ENNIS-FLINT SALEM
RUDD CO INC
FARWEST PAINT MANUFACTURING CO
DURA COAT PRODUCTS INC
VERTRAUEN CHEMIE SOLUTIONS INC
BENJAMIN MOORE & CO JOHNSTOWN
SUMTER COATINGS INC
CHROMAFLO TECHNOLOGIES CORP
NATIONAL COATINGS INC
ENNIS PAINT INC
ENNIS-FLINT NORTH
AKZO NOBEL COATINGS
BAKER PAINT MANUFACTURING
PRINCE MINERALS LLC
NB COATINGS INC
WILLAMETTE VALLEY CO
DAY-GLO COLOR CORP
WINSLOW-BROWNING INC
BARIL COATINGS USA
GILLESPIE COATINGS INC
RUST-OLEUM CORP
TENNESSEE TECHNICAL COATINGS CORP
TCI INC
ATLAS MINERALS & CHEMICALS INC
KELLEY TECHNICAL COATINGS INC
NELSON PAINT CO OF MICHIGAN
SEM PRODUCTS INC
BLUE RIDGE SOLVENTS & COATINGS
MASTERCHEM INDUSTRIES (BEHR ST LOUIS)

301 W HURST BLVD
2555 NE 33RD ST
7100 WRIGHT RD
3530 LANG RD
4501 BRADLEY ST
4600 RIPLEY DR
727 S 950 W
4220 S SARIVAL AVE
5950 S AVALON BLVD
14722 SPRING AVE
9215 SANTA FE SPRINGS RD.
12401 INDUSTRIAL BLVD
1329 POTRERO AVE
12271 MONARCH ST
1603 W ALTON AVE
17451 VON KARMAN AVE
6123 N MARINE DR
2526 NW YEON AVE
1675 COMMERCIAL ST NE
1141 NW 50TH ST
4522 S 133RD ST
5361 VIA RICARDO
2170 BUOY STREET
UNION AVE EXTENSION
2410 HWY 15S
2600 MICHIGAN AVE
604 US HWY 150 E
13213 HWY 79
2803 OLD HWY 75 N
1102 LEITER DR
21104 E US HWY 90
100 PEMCO DR
3000 E 170TH ST
586 MCKINLEY ST
4615 ARDINE ST
215 BROWNSVILLE AVE
401 GROWTH PKWY
211 GUM SPRINGS RD
480 FRELINGHUYSEN AVE
1421 HIGGS RD
734 DIXON DR
1227 VALLEY RD
1445 S 15TH ST
ONE NELSON DR
1685 OVERVIEW DR
3800 ORIGINAL HENRY RD
3135 OLD HWY M

HURST	TARRANT	TX	76053-
FORT WORTH	TARRANT	TX	76111-
HOUSTON	HARRIS	TX	77041-
HOUSTON	HARRIS	TX	77092-
LUBBOCK	LUBBOCK	TX	79415-
EL PASO	EL PASO	TX	79922-
WOODS CROSS	DAVIS	UT	84087-
GOODYEAR	MARICOPA	AZ	85338-
LOS ANGELES	LOS ANGELES	CA	90003-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
VICTORVILLE	SAN BERNARDINO	CA	92395-
SOUTH EL MONTE	LOS ANGELES	CA	91733-
GARDEN GROVE	ORANGE	CA	92841-
SANTA ANA	ORANGE	CA	92704-
IRVINE	ORANGE	CA	92614-
PORTLAND	MULTNOMAH	OR	97203-
PORTLAND	MULTNOMAH	OR	97210-
SALEM	MARION	OR	97301-
SEATTLE	KING	WA	98107-
TUKWILA	KING	WA	98168-
RIVERSIDE	RIVERSIDE	CA	92509-
MEMPHIS	SHELBY	TN	38113-
JOHNSTOWN	FULTON	NY	12095-
SUMTER	SUMTER	SC	29150-
ASHTABULA	ASHTABULA	OH	44004-
GALESBURG	KNOX	IL	61401-
HANNIBAL	RALLS	MO	63401-
ENNIS	ELLIS	TX	75119-
WARSAW	KOSCIUSKO	IN	46580-
SANDERSON	BAKER	FL	32087-
LEESBURG	CHEROKEE	AL	35983-
LANSING	COOK	IL	60438-
EUGENE	LANE	OR	97402-
CUDAHY	LOS ANGELES	CA	90201-
LIBERTY	UNION	IN	47353-
ANGOLA	STEUBEN	IN	46703-
LONGVIEW	GREGG	TX	75602-
NEWARK	ESSEX	NJ	07114-
LEWISBURG	MARSHALL	TN	37091-
ELLAVILLE	SCHLEY	GA	31806-
MERTZTOWN	BERKS	PA	19539-
LOUISVILLE	JEFFERSON	KY	40210-
KINGSFORD	DICKINSON	MI	49802-
ROCK HILL	YORK	SC	29730-
HENRY	FRANKLIN	VA	24102-
IMPERIAL	JEFFERSON	MO	63052-

32.80887	-97.17308
32.80535	-97.31479
29.88123	-95.5892
29.825	-95.488
33.62728	-101.9083
31.8316	-106.57106
40.883209	-111.906241
33.40808	-112.40938
33.98589	-118.2652
33.896389	-118.039722
33.95636	-118.05331
34.47635	-117.28296
34.044077	-118.05565
33.78446	-118.00582
33.70368	-117.8904
33.68794	-117.84387
45.62559	-122.73672
45.54137	-122.69884
44.95553	-123.03357
47.664408	-122.372114
47.488191	-122.28008
34.01742	-117.37927
35.085619	-90.133019
42.992519	-74.390817
33.85387	-80.36867
41.87714	-80.80602
40.92715	-90.32496
39.638746	-91.275345
32.3562	-96.6351
41.244272	-85.876225
30.216109	-82.372298
34.19691	-85.76494
41.58652	-87.5436
44.05366	-123.12984
33.9572	-118.18639
39.63814	-84.93328
41.66592	-85.00417
32.488619	-94.710884
40.703668	-74.193082
35.42915	-86.7625
32.229393	-84.295564
40.508611	-75.665
38.22928	-85.77928
45.80182	-88.07003
34.947443	-80.95061
36.8275	-79.990833
38.365667	-90.45375

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4754	110003315378	325510		
4755	110003492578	325510		
4756	110003501265	325510		
4757	110004018036	325510		
4758	110004261030	325510		
4759	110004525719	325510		
4760	110004667021	325510		
4761	110004746008	325510		
4762	110004835000	325510		
4763	110004835448	325510		
4764	110005030545	325510		
4765	110005043540	325510		
4766	110005114526	325510		
4767	110005184086	325510		
4768	110005705488	325510		
4769	110005719785	325510		
4770	110006034576	325510		
4771	110006335073	325510		
4773	110007531821	325510	2602411	
4774	110007758284	325510		
4775	110007806222	325510		
4776	110009357258	325510		
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4778	110009493672	325510		
4779	110010294350	325510		
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4781	110010324835	325510		
4782	110011350858	325510		
4783	110011395551	325510		
4784	110011855359	325510		
4785	110012141967	325510		
4786	110012179515	325510		
4787	110012601657	325510		
4788	110012609016	325510		
4789	110012702593	325510		
4790	110014003595	325510		
4791	110014349507	325510		
4792	110014448071	325510		
4793	110015313873	325510		
4794	110015583386	325510		
4795	110015679862	325510		
4796	110016685700	325510		
4797	110017069848	325510		

BEHR PROCESS CORP ALLENTOWN
CHEMIONICS CORP
ARIZONA POLYMER FLOORING INC
THE NELSON PAINT CO OF ALABAMA
WILLAMETTE VALLEY CO
STAINLESS STEEL COATINGS INC
CALIFORNIA PRODUCTS CORP
ALDO PRODUCTS CO INC
HD MICROSYSTEMS LLC
COVENTRY COATINGS CORP
AXALTA COATING SYSTEMS LLC - HILLIARD SITE
DIAMOND VOGEL PAINT CO INC
UNITED GILSONITE LABORATORIES
BRADLEY COATINGS GROUP
NOV TUBOSCOPE HOLMES ROAD
INTERCOASTAL PAINT CO INC
GEMINI COATINGS INC OF GRAND PRAIRIE
SHERWIN-WILLIAMS CO
L M SCOFIELD
BEHR PROCESS CORP ATLANTA
GULF COAST PAINT MANUFACTURING
PIONEER MANUFACTURING CO
WR MEADOWS INC
WATSON STANDARD CO HARWICK PLANT
HARRIS PAINTS CORP
ENGINEERED POLYMER SOLUTIONS INC D/B/A VALSPAR COATINGS
NCP COATINGS INC
POLYCOAT PRODUCTS LLC
RUST-OLEUM CORP
CHROMAFLO TECHNOLOGIES CORP
PPG ARCHITECTURAL COATINGS
ANVIL PAINTS & COATINGS INC
AERVOE INDUSTRIES INC
JOTUN PAINTS INC
CARLISLE COATINGS & WATERPROOFING INC
CUSTOM-PAK PRODUCTS INC
KOP-COAT INC
US PAINT CORP
BASF CORP - LANCASTER SITE
ENGINEERED POLYMER SOLUTIONS INC D/B/A VALSPAR COATINGS
DURA COAT PRODUCTS INC
FLAME CONTROL COATINGS,LLC
KELLEY TECHNICAL COATINGS INC
SUN COATINGS INC
CADDO PIGMENT LLC
HIS PAINT MANUFACTURING CO
DIVERSIFIED COATING SYSTEMS INC

7529 MORRIS CT BLDG 500 W PARK BUSINESS CENTER
390 MUNROE FALLS RD
7731 N 68TH AVE
3235 BIRMINGHAM HWY
4502 WILLAMETTE BLVD
835 STERLING RD
150 DASCOMB RD
1604 N MAIN ST
250 CHEESEQUAKE RD C/O DUPONT BUILDING 424
89 TAFT AVE
4130 LYMAN DR
5111 E 36TH ST N
1396 JEFFERSON AVE
608 W CRAWFORD AVE
2811 HOLMES RD
14029 W HARDY
2350 114TH ST
710 106 ST
4155 SCOFIELD RD
130 DECLARATION DR
30075 COUNTY RD 49
4529 INDUSTRIAL PKWY
300 INDUSTRIAL DR
616 HITE RD
25 C STREET, MINILLAS INDUSTRIAL PARK, BAYAMON, PR
13129 HARLAND DRIVE NE
1413 CLOVER RD
2100 RELIANCE PKWY
173 BELMONT DR
620 SHEPHERD DR
6804 ENTERPRISE DRIVE
1255 STARKEY RD
1191 MARK CIRCLE
9203 HWY 23
900 HENSLEY LN
N118 W18981 BUNSEN DR
5137 SW AVE
831 S 21ST ST
2425 W LONGHORN DR
11300 CLAUDE FREEMAN DR
26655 PEOPLES RD
4120 HYDE PARK BLVD
1401 S. 15TH STREET
4701 E 7TH AVE
2501 FULTON ST
1801 W. RENO
309 ECHELON ROAD

ALLENTOWN	LEHIGH	PA	18106-
TALLMADGE	SUMMIT	OH	44278-
GLENDALE	MARICOPA	AZ	85303-
MONTGOMERY	MONTGOMERY	AL	36108-
PINEVILLE	RAPIDES	LA	71360-
LANCASTER	WORCESTER	MA	01523-
ANDOVER	ESSEX	MA	01810-
KANNAPOLIS	ROWAN	NC	28081-
PARLIN	MIDDLESEX	NJ	08859-
NEWBURGH	ORANGE	NY	12550-
HILLIARD	FRANKLIN	OH	43026-
TULSA	TULSA	OK	74115-
DUNMORE	LACKAWANNA	PA	18509-
CONNELLSVILLE	FAYETTE	PA	15425-
HOUSTON	HARRIS	TX	77051-
HOUSTON	HARRIS	TX	77060-
GRAND PRAIRIE	TARRANT	TX	75050-
ARLINGTON	TARRANT	TX	76011-
DOUGLASVILLE	DOUGLAS	GA	30134-
MC DONOUGH	HENRY	GA	30253-
LOXLEY	BALDWIN	AL	36551-
CLEVELAND	CUYAHOGA	OH	44135-
HAMPSHIRE	KANE	IL	60140-
HARWICK	ALLEGHENY	PA	15049-
BAYAMON	BAYAMON	PR	00959-
COVINGTON	NEWTON	GA	30014-
MISHAWAKA	ST JOSEPH	IN	46545-
BEDFORD	TARRANT	TX	76021-
SOMERSET	SOMERSET	NJ	08873-
LOCKLAND	HAMILTON	OH	45215-
LOUISVILLE	JEFFERSON	KY	40214-
LARGO	PINELLAS	FL	33771-
GARDNERVILLE	DOUGLAS	NV	89410-
BELLE CHASSE	PLAQUEMINES PARISH	LA	70037-
WYLIE	COLLIN	TX	75098-
GERMANTOWN	WASHINGTON	WI	53022-
SAINT LOUIS	ST LOUIS (CITY)	MO	63110-
SAINT LOUIS	ST LOUIS (CITY)	MO	63103-
LANCASTER	DALLAS	TX	75134-
CHARLOTTE	MECKLENBURG	NC	28262-
MADISON	LIMESTONE	AL	35756-
NIAGARA FALLS	NIAGARA	NY	14305-
LOUISVILLE	JEFFERSON	KY	40210-
TAMPA	HILLSBOROUGH	FL	33605-
SHREVEPORT	CADDO	LA	71103-
OKLAHOMA CITY	OKLAHOMA	OK	73106-
GREENVILLE	GREENVILLE	SC	29605-

40.56607	-75.60377
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33.5501	-112.2041
32.37302	-86.37577
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42.62353	-71.18141
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29.673672	-95.386108
29.92112	-95.37776
32.7896	-97.0377
32.75412	-97.05999
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39.23731	-84.46402
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27.906605	-82.760628
38.92565	-119.69961
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4841	110067010264	325510		
4842	110067256267	325510		
4843	110067536928	325510		
4844	110069260463	325510		

CENTURY INDUSTRIAL COATINGS I NC
LHB INDUSTRIES
AMERICAN COLORS INC DISPERSION PLANT LEBANON TN
VOLATILE FREE INC
OMG INC
ENNIS-FLINT RICHMOND
PRECISION / MASTER MADE PAINTS
NEW NAUTICAL COATINGS INC
HEMMELRATH COATINGS
BEHR PROCESS CORP - ROANOKE
WHITFORD CORP
DAMPNEY CO INC
ENGINEERED POLYMER SOLUTIONS INC D/B/A VALSPAR COATINGS
STANDARD PAINTS INC
STRATHMORE HOLDINGS LONGVIEW PLANT
PPG PROTECTIVE & MARINE COAT INGS
QUEST CONSTRUCTION PRODUCTS LLC - CHARLESTON
PENN COLOR RINGGOLD
THREE BOND INTERNATIONAL INC
CE BRADLEY LABORATORIES INC
ITW POLYMERS SEALANTS NA
QUEST CONSTRUCTION PRODUCTS LLC - PHOENIX
PPG INDUSTRIES INC
PPG INDUSTRIES INC
BENJAMIN MOORE & CO-MILFORD
KEMPER SYSTEM AMERICA INC
STRATHMORE HOLDINGS LLC
HENTZEN AEROSPACE
CHROMASCAPE INC
CHASE CORP - PITTSBURGH
WILLAMETTE VALLEY CO
PPG ARCHITECTURAL FINISHES INC
INTREPID COATINGS INC
BENJAMIN MOORE & CO PELL CITY
TRANSTAR AUTOBODY TECHNOLOGIES
DSM DESOTECH INC D/B/A DSM FUNCTIONAL MATERIALS
IFS COATINGS INC
PPG ARCHITECTURAL COATINGS (PUERTO RICO) INC
SUN COATINGS PHOENIX
TRINKOTE INDUSTRAIL FINISHES INC
BASF CORP
POSTLE EXTRUSIONS
AMERICAN COLORS INC DISPERSION FACILITY GALLATIN TN
CHEMSPEC USA LLC
BENDA-LUTZ CORP
CHEMEX INC
STONCOR GROUP INC CHERRY HILL

HWY 69 S
8833 FLEISCHER PL
909 TENNESSEE BLVD
19500 JANACEK CT
6900 BLECK DR
4400 VAWTER AVE
8040 E ALLIANCE PKWY
14805 49TH ST N
140 CONGRESS BLVD
701 GATEWAY PKWY
47 PARK AVE
85 PARIS ST
3050 HANFORD DR
940 S 6TH AVE
10 ROBERT WILSON RD
11605 VIMY RIDGE RD
1465 PIPEFITTER ST
540 HACKET MILL RD
101 DARUMA PKWY
55 BENNETT DR
3700 S PALO VERDE RD
2810 S 18TH PL
1825 E NATIONAL AVE
550 CENTENNIAL BLVD
49 SUMNER ST
1200 N AMERICA DR
BURR DR
307 ECHELON RD
1327 NEW LAIR ROAD
201 ZETA DRIVE
6662 MARBUT RD
350 SPROWL ROAD
1910 E RIVERVIEW DR
109 BAMBERG DR
2040 HEISERMAN DR
1101 HWY 27 S
3601 N I-35
#630 FERIA ST METROPOLITAN IND US TRIAL PARK
4035 W ADAMS ST
800 HUGHIE LONG RD
1725 DAYTON AVE
201 N EDWARDS ST
1385 GATEWAY DRIVE
9287 SMUCKER RD
10500 TOEBBEN DR
2822 N 35TH ST
7 ESTERBROOK LN

JACKSONVILLE	CHEROKEE	TX	75766-
BERKELEY	ST LOUIS	MO	63134-
LEBANON	WILSON	TN	37087-
BROOKFIELD	WAUKESHA	WI	53045-
ROCKFORD	WRIGHT	MN	55373-
RICHMOND	HENRICO	VA	23222-
JOPLIN	JASPER	MO	64804-
CLEARWATER	PINELLAS	FL	33762-
DUNCAN	SPARTANBURG	SC	29334-
ROANOKE	DENTON	TX	76262-
ELVERSON	CHESTER	PA	19520-
EVERETT	MIDDLESEX	MA	02149-
LEBANON	LEBANON	PA	17046-
MANSFIELD	JOHNSON	TX	76063-
LONGVIEW	HARRISON	TX	75602-
ALEXANDER	PULASKI	AR	72002-
CHARLESTON	CHARLESTON	SC	29405-
RINGGOLD	CATOOSA	GA	30736-
DAYTON	MONTGOMERY	OH	45439-
BRATTLEBORO	WINDHAM	VT	05301-
TUCSON	PIMA	AZ	85713-
PHOENIX	MARICOPA	AZ	85034-
BRAZIL	CLAY	IN	47834-
CASA GRANDE	PINAL	AZ	85122-
MILFORD	WORCESTER	MA	01757-
WEST SENECA	ERIE	NY	14224-
CLAY	ONONDAGA	NY	13041-
GREENVILLE	GREENVILLE	SC	29605-
CYNTHIANA	HARRISON	KY	41031-
PITTSBURGH	ALLEGHENY	PA	15238-
LITHONIA	DEKALB	GA	30058-
HURON	ERIE	OH	44839-
PHOENIX	MARICOPA	AZ	85034-
PELL CITY	ST CLAIR	AL	35125-
BRIGHTON	LIVINGSTON	MI	48114-
STANLEY	GASTON	NC	28164-
GAINESVILLE	COOKE	TX	76240-
CAROLINA	CAROLINA	PR	00987-
PHOENIX	MARICOPA	AZ	85009-
CRESSON	HOOD	TX	76035-
AMES	STORY	IA	50010-
CASSOPOLIS	CASS	MI	49031-
GALLATIN	SUMNER	TN	37066-
ORRVILLE	WAYNE	OH	44667-
WALTON	BOONE	KY	41051-
TAMPA	HILLSBOROUGH	FL	33605-
CHERRY HILL	CAMDEN	NJ	08003-

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38.75868	-90.34152
36.20324	-86.2729
43.0332	-88.15541
45.0987	-93.75451
37.58766	-77.40728
37.061508	-94.404653
27.905673	-82.699611
34.90565	-82.1018
32.99901	-97.24227
40.161499	-75.827492
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32.54654	-97.15091
32.46293	-94.68479
34.644444	-92.431667
32.860462	-79.967185
34.9017	-85.11405
39.708664	-84.253324
42.89601	-72.54927
32.17964	-110.91772
33.420797	-112.042367
39.52848	-87.1048
32.94577	-111.75973
42.14703	-71.51707
42.84767	-78.74247
43.118623	-76.195092
34.74063	-82.37526
38.37301	-84.29329
40.5016	-79.863599
33.72688	-84.11697
41.37309	-82.540899
33.41814	-112.0413
33.59194	-86.24258
42.57197	-83.81149
35.373426	-81.099156
33.66818	-97.15134
18.377477	-65.933697
33.44978	-112.14638
32.5364	-97.63358
42.040204	-93.583221
41.912741	-85.993644
36.404228	-86.398566
40.85902	-81.80973
38.94722	-84.61511
27.970018	-82.421143
39.914265	-74.965399

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4865	110000345396	325520		
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4875	110000382844	325520		
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4879	110000425727	325520		
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4881	110000447570	325520		
4882	110000450592	325520		
4883	110000456168	325520		
4884	110000456603	325520		
4885	110000457693	325520		
4886	110000458549	325520		
4887	110000460260	325520		
4888	110000460304	325520		
4889	110000461937	325520		
4890	110000473648	325520		
4891	110000493939	325520		
4892	110000496482	325520		
4893	110000499835	325520		

MASTER PAINTS & CHEMICALS CORP
CPJ TECHNOLOGIES
SHERWIN-WILLIAMS CO
PRC-DESOTO INTERNATIONAL INC
PRC-DESOTO INTERNATIONAL INC
PRC-DESOTO INTERNATIONAL INC
LORD CORP
LATICRETE INTERNATIONAL, INC. C/O PONCA HILLS
MICA CORP
TOYO INK AMERICA LLC
ROBERTS CAPITOL
USG CHAMBLEE PLANT
US GYPSUM CO
KEY POLYMER
OLYMPIC ADHESIVES INC
TOPCOAT
SOLAR COMPOUNDS CORP
MON-ECO INDUSTRIES INC
IFS INDUSTRIES INC
UPACO ADHESIVES INC
GAC WINSTON SALEM INC
HARPER/LOVE ADHESIVES CORP
HENKEL CORP
CUSTOM BUILDING PRODUCTS
ARROW ADHESIVES CO
SHERWIN-WILLIAMS CO
CORK INDUSTRIES
HELMITIN INC
SIKA CORP-MARION OPERATIONS
UNISEAL INC
EFTEC NORTH AMERICAS LLC
AXSON REVOCOAT
HB FULLER
SUN PROCESS CONVERTING CO
WILLIAM H HARVEY CO
ECLECTIC PRODUCTS INC
IFS INDUSTRIES GARLAND
QUADRANT CHEMICAL CORP
DAP PRODUCTS INC
NATIONAL CASEIN CO
WILSONART LLC-ADHESIVE DIV
PPG ARCHITECTURAL COATINGS LIQUID NAILS ADHESIVES
RECTORSEAL
HUNTSMAN ADVANCED MATERIALS AMERICAS LLC-LA SITE
AXSON TECH USA INC
SLOCUM ADHESIVES CORP
BOSTIK INC

PR-127 KM. 12.7
200 TANNER DR
2504 MARINA DR
6022 CORPORATE WAY
14126 NE 190TH ST
24811 AVENUE ROCKEFELLER
601 SOUTH ST
1050 COUNTY ROAD P47
9 MOUNTAIN VIEW DR
2400 NORTH HARVEY MITCHELL PARKWAY
300 CROSS PLAINS BLVD
4859 NEW PEACHTREE RD
255 REGAL ROW
17 SHEPARD ST LAWRENCE INDUSTRIAL PARK
670 CANTON ST
24 INDUSTRIAL RD
1201 W BLANKE ST
5 JOANNA CT
400 ORRTON AVE
4105 CASTLEWOOD RD
1664 S MARTIN LUTHER KING JR DR
11101 WESTLAKE DR
9 FURMAN HALL COURT
2155 SWEETWATER IND. BLVD
5457 SPALDING DR
725 RACO DR
5555 W BEAVER ST
11110 AIRPORT RD
1682 MARION WILLIAMSPORT RD
1014 UHLHORN ST
20219 NORTHLINE RD
2300 GAINSBORO ST
5220 MAIN ST NE
1660 KENNETH DR
4334 S 67TH ST
4507 WILLAMETTE BLVD
2222 LONNECKER DR
200 INDUSTRIAL BLVD
13555 JUPITER RD
13039 GAUT AVE
10601 NW HK DODGEN LOOP
3410 LUCIUS MCCELVEY
2601 SPENWICK DR
5121 SAN FERNANDO RD W
31200 STEPHENSON HWY
1409 BUCHANAN ST
1500 PARKER RD

GUAYANILLA	GUAYANILLA	PR	00656-
TAYLORS	GREENVILLE	SC	29687-
ELKHART	ELKHART	IN	46514-
INDIANAPOLIS	MARION	IN	46278-
WOODINVILLE	KING	WA	98072-
VALENCIA	LOS ANGELES	CA	91355-
SAEGERTOWN	CRAWFORD	PA	16433-
OMAHA	WASHINGTON	NE	68152-
SHELTON	FAIRFIELD	CT	06484-
BRYAN	BRAZOS	TX	77807-
DALTON	WHITFIELD	GA	30721-
CHAMBLEE	DEKALB	GA	30341-
DALLAS	DALLAS	TX	75247-
LAWRENCE	ESSEX	MA	01843-
NORWOOD	NORFOLK	MA	02062-
WALPOLE	NORFOLK	MA	02081-
LINDEN	UNION	NJ	07036-
EAST BRUNSWICK	MIDDLESEX	NJ	08816-
READING	BERKS	PA	19611-
RICHMOND	RICHMOND (CITY)	VA	23234-
WINSTON SALEM	FORSYTH	NC	27107-
CHARLOTTE	MECKLENBURG	NC	28273-
GREENVILLE	GREENVILLE	SC	29609-
LITHIA SPRINGS	DOUGLAS	GA	30122-
NORCROSS	GWINNETT	GA	30092-
LAWRENCEVILLE	GWINNETT	GA	30046-
JACKSONVILLE	DUVAL	FL	32254-
OLIVE BRANCH	DESOTO	MS	38654-
MARION	MARION	OH	43302-
EVANSVILLE	VANDERBURGH	IN	47710-
TAYLOR	WAYNE	MI	48180-
FERNDALE	OAKLAND	MI	48220-
FRIDLEY	ANOKA	MN	55421-
MOUNT PROSPECT	COOK	IL	60056-
OMAHA	DOUGLAS	NE	68117-
PINEVILLE	RAPIDES	LA	71360-
GARLAND	DALLAS	TX	75041-
MCKINNEY	COLLIN	TX	75069-
DALLAS	DALLAS	TX	75238-
TYLER	SMITH	TX	75708-
TEMPLE	BELL	TX	76504-
TEMPLE	BELL	TX	76504-
HOUSTON	HARRIS	TX	77055-
LOS ANGELES	LOS ANGELES	CA	90039-
MADISON HEIGHTS	OAKLAND	MI	48071-
LYNCHBURG	LYNCHBURG (CITY)	VA	24501-
CONYERS	ROCKDALE	GA	30094-

18.01382	-66.774597
34.91386	-82.33265
41.71994	-85.9171
39.87288	-86.26671
47.76552	-122.15305
34.43003	-118.56832
41.7146	-80.14462
41.39474	-95.996205
41.29262	-73.08954
30.70138	-96.42933
34.67569	-84.96877
33.88106	-84.3185
32.81615	-96.89992
42.68751	-71.17855
42.201532	-71.162476
42.11842	-71.2689
40.623229	-74.263997
40.44585	-74.40548
40.31491	-75.92886
37.47021	-77.44595
36.07639	-80.22022
35.13746	-80.9719
34.886944	-82.400027
33.77203	-84.64618
33.969458	-84.219346
33.958379	-84.026499
30.325667	-81.743278
34.978611	-89.792778
40.61509	-83.08399
37.99505	-87.57681
42.21299	-83.23329
42.46533	-83.12887
45.06285	-93.26803
42.03025	-87.95624
41.2194	-96.01557
31.381252	-92.427499
32.89084	-96.67344
33.17862	-96.6097
32.88218	-96.68462
32.43325	-95.19041
31.1403	-97.3584
31.13594	-97.35118
29.82148	-95.49037
34.14521	-118.271546
42.52152	-83.1194
37.40269	-79.15198
33.64868	-84.02059

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4927	110039018826	325520		
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4929	110041625765	325520		
4930	110041963257	325520		
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4938	110000357275	325611 325620 325612		
4939	110015787923	325611 325998 325612		
4940	110012489440	325611 325613 325620		

AXSON TECH USA INC
HENKEL
POLYMER ADHESIVE SEALANT SYSTEMS INC
HENKEL CLEVELAND MANUFACTURING FACILITY
HB FULLER
GARDNER GIBSON HOUSTON INC
ADVANCED ADHESIVE SYSTEMS INC
BOSTIK INC
ENDURANCE TECHNOLOGIES INC
WORTHEN INDUSTRIES INC UPACO DIV
H B FULLER CO
APLHA SYSTEMS INC
HENKEL CORP
LATICRETE INTERNATIONAL INC
PECORA CORP
MAGNUM PRODUCTS
MAGNUM PRODUCTS
UNISEAL INC
MAGNUM PRODUCTS
YOKOHAMA INDUSTRIES AMERICAS (SEALANT DIV)
VOLUNTEER ADHESIVE CORP
MAGNUM PRODUCTS
QUADRANT CHEMICAL CORP TC&P
SUPERIOR STONE PRODUCTS INC
GTA-NHT INC
W F TAYLOR CO INC
SOUTHEAST COMPOUNDS
XL BRANDS
MAPEI CORP
TEXTILE RUBBER & CHEMICAL CO
RESIN TECHNOLOGY GROUP LLC
MAPEI CORP
POLYSET CO INC
MAPEI CORP
MAPEI CORP
DRITAC FLOORING PRODUCTS LLC
DOW CHEMICAL CO DOW AUTOMOTIVE HILLSDALE
SUNSTAR ENGINEERING AMERICAS INC AUTOMOTIVE DIV
EPOXIES ETC
ROYAL ADHESIVES & SEALANTS
DEXERIALS AMERICA CORP
UNISEAL INC
MAPEI CORP
COMSTAR INTERNATIONAL INC
ABC COMPOUNDING CO INC
CROWN CHEMICAL INC
ZEP INC

1611 HULTS DR
1350 TANEY ST
501 GARRETT MORRIS PKWY
18731 CRANWOOD PKWY
12110 HARLAND DR NE
919 CROSSTIMBERS
681 NORTH MOUNTAIN RD
27460 BOSTIK CT
275 BRIDGE POINT WAY
3 E SPITBROOK RD
2333 FULLER WAY
5120 BECK DR
201 HWY 10 E
91 AMITY RD
165 WAMBOLD RD
3939 E 5TH AVE
6007 N 54TH ST
1800 W MARYLAND ST
15740 W 108TH ST
103 KUHLMAN BLVD
570 INDUSTRIAL DR
166 LONGVIEW CIR
3309 W KINGSLEY
8580 BYRON COMMERCE DR
19 SMILEY INGRAM RD
209 CROWN LAKE DRIVE SE
20 N DR SE
198 NEXUS DRIVE
1501 WALL ST
63 WATER ST
28 NORFOLK AVE
2424 ABUTMENT ROAD
65 HUDSON AVE
5415 N INDUSTRIAL PKWY
300 NELMS CIR
60 WEBRO ROAD
186 URAN ST
85 S PIONEER BLVD
21 STARLINE WAY
17340 MUNN RD
215 SATELLITE BOULEVARD NE, SUITE 400
1000 GROVE ST
1851 NORTHWEST 22ND STREET
20-45 128 ST
6970 JONESBORO RD
4701 W 136TH ST
525 E CENTRE PARK BLVD

EATON RAPIDS	EATON	MI	48827-
NORTH KANSAS CITY	CLAY	MO	64116-
MINERAL WELLS	PALO PINTO	TX	76067-
CLEVELAND	CUYAHOGA	OH	44128-
COVINGTON	NEWTON	GA	30014-
HOUSTON	HARRIS	TX	77022-
NEWINGTON	HARTFORD	CT	06111-
TEMECULA	RIVERSIDE	CA	92590-
SOUTH SAINT PAUL	DAKOTA	MN	55075-
NASHUA	HILLSBOROUGH	NH	03060-
TUCKER	DEKALB	GA	30084-
ELKHART	ELKHART	IN	46516-
RICHMOND	RAY	MO	64085-
BETHANY	NEW HAVEN	CT	06524-
HARLEYSVILLE	MONTGOMERY	PA	19438-
COLUMBUS	FRANKLIN	OH	43219-
TAMPA	HILLSBOROUGH	FL	33610-
EVANSVILLE	VANDERBURGH	IN	47712-
LENEXA	JOHNSON	KS	66219-
VERSAILLES	WOODFORD	KY	40383-
LAFAYETTE	MACON	TN	37083-
ALABASTER	SHELBY	AL	35007-
GARLAND	DALLAS	TX	75041-
BYRON CENTER	KENT	MI	49315-
CARTERSVILLE	BARTOW	GA	30121-
DALTON	WHITFIELD	GA	30721-
ACWORTH	COBB	GA	30102-
DALTON	GORDON	GA	30721-
GARLAND	DALLAS	TX	75041-
FALL RIVER	BRISTOL	MA	02721-
SOUTH EASTON	BRISTOL	MA	02375-
DALTON	WHITFIELD	GA	30721-
MECHANICVILLE	SARATOGA	NY	12118-
SAN BERNARDINO	SAN BERNARDINO	CA	92407-
FREDERICKSBURG	STAFFORD	VA	22406-
CLIFTON	PASSAIC	NJ	07012-
HILLSDALE	HILLSDALE	MI	49242-
SPRINGBORO	WARREN	OH	45066-
CRANSTON	PROVIDENCE	RI	02921-
CHAGRIN FALLS	GEAUGA	OH	44023-
SUWANEE	GWINNETT	GA	30024-
EVANSVILLE	VANDERBURGH	IN	47710-
FORT LAUDERDALE	BROWARD	FL	33311-
COLLEGE POINT	QUEENS	NY	11356-
MORROW	CLAYTON	GA	30260-
CRESTWOOD	COOK	IL	60445-
DESOTO	DALLAS	TX	75115-

42.49249	-84.65134
39.13395	-94.55672
32.80712	-98.08278
41.43904	-81.54748
33.617778	-83.831389
29.828673	-95.387345
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44.88999	-93.02899
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40.262036	-75.348841
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32.87893	-96.67988
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34.691804	-84.991093
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34.66433	-84.98079
32.8744	-96.65814
41.70382	-71.16343
42.04799	-71.07712
34.71812	-84.96239
42.92946	-73.72231
34.17935	-117.34909
38.35232	-77.4988
40.851488	-74.156855
41.93735	-84.64863
39.5597	-84.25572
41.78955	-71.52655
41.3973	-81.27454
34.03865	-84.04472
37.98863	-87.5881
26.15492	-80.16714
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41.64498	-87.73535
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4984	110000475566	325611		
4985	110000477813	325611		
4986	110000479973	325611		
4987	110000485449	325611		

PERMATEX SOLON
CHEMTEK INC YANCEYVILLE MANUFACTURING FACILITY
BYK USA INC
TRANS-MATE INC
DAMON INDUSTRIES INC
NEW DAWN MANUFACTURING CO
CARROLL CO CALIFORNIA DIV
ALEX C FERGUSSON INC
MT HOOD SOLUTIONS
PILOT LABORATORIES
TORCH SURFACE TECHNOLOGIES
WAUSAU CHEMICAL CORP
R H CROWN CO INC
SHORE CORP
BULLEN COS
NATIONAL CHEMICAL LABORATORIES INC
SAPPHIRE SCIENTIFIC
GILMER INDUSTRIES INC
CLOROX PRODUCTS MANUFACTURING CO
HILL MANUFACTURING CO INC
ZEP INC
STEPAN CO
CHEMICAL SYSTEMS OF ORLANDO INC
ROYAL CHEMICAL CO
CHEMPACE CORP
GOJO INDUSTRIES INC
CALVARY INDUSTRIES INC
DUBOIS CHEMICALS INC
CHEMSTATION INTERNATIONAL
WAYNE CHEMICAL INC
MADISON CHEMICAL CO INC
DIVERSEY INC
ACE CHEMICAL PRODUCTS INC
CLEANING SYSTEMS INC
PROCHASKA LLC
1ST AYD CORP
BULLEN MIDWEST INC
STERIS CORP ST LOUIS OPERATIONS
KO MANUFACTURING INC
WECHEM INC
CENTURY PRODUCTS INC
ECOLAB INC
CARROLL CO
CUSTOM CHEMICAL FORMULATORS INC
MAINTEX INC
GOODWIN CO
CHEMLAND (DBA DELAVAL MANUFACTURING)

6875 PARKLAND BLVD
697 COUNTY HOME RD
48 LEONE LN
13 STERLING RD
12435 ROCKHILL NE
16001 TRADE ZONE AVE
11641 PIKE ST
800 DEVELOPMENT AVE
14546 N LOMBARD ST
267 HOMESTEAD AVE
10781 PLAZA DR
2001 N RIVER DR
100 N MARKET ST
2917 SPRUCE WAY
1640 DELMAR DR
401 N 10TH ST
901 N NEWKIRK ST
560 STONE SPRING RD
17 LAKE MIRROR RD
1500 JONESBORO RD., SE
1310 SEABOARD INDUSTRIAL BLVD
951 BANKHEAD HWY
6429 W JONES AVE
110 PARMENAS LN
339 ARCO DR
3783 STATE RD
9233 SEWARD RD
3630 E KEMPER RD
3400 ENCRETE LN
7114 HOMESTEAD RD
3141 CLIFTY DR
316 HART ST
8415 N 87TH ST
1997 AMERICAN BLVD
12502 XENWOOD AVE S
1325 GATEWAY DRIVE
1140 E 103RD ST
7501 PAGE AVE
2720 E DIVISION
5734 SUSITNA DR
2901 BELMEADE DR
2305 SHERWIN ST
2900 W KINGSLEY RD
8707 MILLERGROVE DRIVE
13300 E NELSON AVE
12361 MONARCH ST
1298 S WALNUT RD

SOLON	CUYAHOGA	OH	44139-
BLANCH	CASWELL	NC	27212-
CHESTER	ORANGE	NY	10918-
NORTH BILLERICA	MIDDLESEX	MA	01862-
ALLIANCE	STARK	OH	44601-
UPPER MARLBORO	PRINCE GEORGES	MD	20774-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
CHAMBERSBURG	FRANKLIN	PA	17201-
PORTLAND	MULTNOMAH	OR	97203-
AVENEL	MIDDLESEX	NJ	07001-
WHITMORE LAKE	LIVINGSTON	MI	48189-
WAUSAU	MARATHON	WI	54403-
JOHNSTOWN	FULTON	NY	12095-
PITTSBURGH	ALLEGHENY	PA	15201-
FOLCROFT	DELAWARE	PA	19032-
PHILADELPHIA	PHILADELPHIA	PA	19123-
BALTIMORE	BALTIMORE (CITY)	MD	21205-
HARRISONBURG	HARRISONBURG (CITY)	VA	22801-
FOREST PARK	CLAYTON	GA	30297-
ATLANTA	FULTON	GA	30315-
ATLANTA	FULTON	GA	30318-
WINDER	BARROW	GA	30680-
ZELLWOOD	ORANGE	FL	32798-
CHATTANOOGA	HAMILTON	TN	37405-
TOLEDO	LUCAS	OH	43607-
CUYAHOGA FALLS	SUMMIT	OH	44223-
FAIRFIELD	BUTLER	OH	45014-
SHARONVILLE	HAMILTON	OH	45241-
DAYTON	MONTGOMERY	OH	45439-
FORT WAYNE	ALLEN	IN	46814-
MADISON	JEFFERSON	IN	47250-
WATERTOWN	JEFFERSON	WI	53094-
MILWAUKEE	MILWAUKEE	WI	53224-
DE PERE	BROWN	WI	54115-
SAVAGE	SCOTT	MN	55378-
ELGIN	KANE	IL	60124-
CHICAGO	COOK	IL	60628-
SAINT LOUIS	ST LOUIS (CITY)	MO	63133-
SPRINGFIELD	GREENE	MO	65803-
HARAHAN	JEFFERSON PARISH	LA	70123-
CARROLLTON	DALLAS	TX	75006-
GARLAND	DALLAS	TX	75041-
GARLAND	DALLAS	TX	75041-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
CITY OF INDUSTRY	LOS ANGELES	CA	91746-
GARDEN GROVE	ORANGE	CA	92841-
TURLOCK	STANISLAUS	CA	95380-

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40.9512	-81.11529
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42.447285	-83.764087
44.958259	-89.630952
43.00831	-74.37283
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39.89472	-75.27805
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39.30204	-76.55772
38.41965	-78.88542
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38.7507	-85.44991
43.18361	-88.72163
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CRAFT LABORATORIES INC
KIK SOCAL INC
ECOLAB INC
WHITING SYSTEMS INC
DIAMOND CHEMICAL CO INC
KAFKO INTERNATIONAL LTD
CHEMSTATION OF NORTHERN CALIFORNIA
HOBO INC
PENETONE CORP
ARROW CHEMICAL CORP
KOR-CHEM INC
NYCO PRODUCTS CO
PROCTER & GAMBLE MANUFACTURING CO LIMA PLANT
CLEANEDGE LLP
NORTHERN LABS INC WEST DRIVE
INDCO INC
CHURCH & DWIGHT CO INC
PRIDE ACI SANITARY MAINTENANCE & SUPPLIES
QUESTVAPCO CORP
PROCTER & GAMBLE MANUFACTURING CO
WEXFORD LABORATORIES INC
FULLER INDUSTRIES LLC
CHEMSTATION OF THE OZARKS
AT-CHEM INC
TWI-LAQ INDUSTRIES INC
CHEMSTATION OF ALABAMA
ROYAL CHEMICAL CO
CHEMSTATION OF SOUTH CAROLINA
MEYER LABORATORY INC
FORMULA CORP
INTERCON CHEMICAL CO
ROYAL CHEMICAL CO
CRESCENT MARKETING (DBA CRESCENT MANUFACTURING)
ECOLAB INC
PARISER INDUSTRIES INC
CAR PRODUCTS INC
SWISHER HYGIENE INC
DELAVAL MANUFACTURING
COLONIAL CHEMICAL INC
PACKERS CHEMICAL-KIELER
CHEMSTATION
CHURCH & DWIGHT CO INC
HOLLOWAY HOUSE INC
CHEMSTATION PHILADELPHIA
TOM'S OF MAINE INC
SOLUTIONS PLUS INC
ROCHESTER MIDLAND CORP

1901 LAKEVIEW DR
9028 DICE RD
261 HWY 155 S
9000 HWY 5 N
UNION AVE & DUBOIS ST
3555 W HOWARD ST
1448 SHAW RD
21365 HAMBURG AVE
700 GOTHAM PKWY
28 RIDER PL
5800 BUCKNELL DR
5332 DANSHER RD
3875 RESERVOIR RD
3121 WILMARCO DR
5800 W DR
NORTH RAILROAD AND ESSEX ST
800 AIRPORT RD.
SR 64 - 9 MILES E OF AVON PARK
401 MARSHALL RD
6200 BRYAN PARK RD
325 LEFFINGWELL AVE
ONE FULLER WAY
1213 ESI DR
1225 W MAIN ST
1345 SENECA AVE
3021 DUBLIN CIR
8679 FREEWAY DR
110 SUNBELT AVE
2401 W JEFFERSON
4432 C ST NE
1100 CENTRAL INDUSTRIAL DR
2851 REWARD LN
10285 EAGLE DR
18383 E RAILROAD ST
91 MICHIGAN AVE
630 BEAULIEU ST
4100 W 76TH ST
1322 AVENUE R
225 COLONIAL DR
3729 PEDDLE HOLLOW RD
50 FRONTIER WAY
5197 COMMERCE DR
309 BUSINESS PARK DRIVE
415 BOOT ROAD SUITE B
27 COMMUNITY DR
3907 BACH BUXTON RD
155 PARAGON DRIVE

FORT WAYNE	ALLEN	IN	46808-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
MC DONOUGH	HENRY	GA	30253-
ALEXANDER	SALINE	AR	72002-
EAST RUTHERFORD	BERGEN	NJ	07073-
SKOKIE	COOK	IL	60076-
STOCKTON	SAN JOAQUIN	CA	95215-
LAKEVILLE	DAKOTA	MN	55044-
CARLSTADT	BERGEN	NJ	07072-
FREEPORT	NASSAU	NY	11520-
ATLANTA	FULTON	GA	30336-
COUNTRYSIDE	COOK	IL	60525-
LIMA	ALLEN	OH	45801-
BALTIMORE	BALTIMORE (CITY)	MD	21223-
MANITOWOC	MANITOWOC	WI	54221-
GLOUCESTER CITY	CAMDEN	NJ	08030-
LAKEWOOD	OCEAN	NJ	08701-
AVON PARK	POLK	FL	33825-
VALLEY PARK	ST LOUIS	MO	63088-1898
BROWNS SUMMIT	GUILFORD	NC	27214-
KIRKWOOD	ST LOUIS	MO	63122-
GREAT BEND	BARTON	KS	67530-
SPRINGDALE	WASHINGTON	AR	72764-
WILMINGTON	CLINTON	OH	45177-
BRONX	BRONX	NY	10474-
BESSEMER	JEFFERSON	AL	35022-
MACEDONIA	SUMMIT	OH	44056-
COLUMBIA	RICHLAND	SC	29203-
BLUE SPRINGS	JACKSON	MO	64015-
AUBURN	KING	WA	98002-
SAINT LOUIS	ST LOUIS (CITY)	MO	63110-
DALLAS	DALLAS	TX	75220-
NORTH COLLINS	ERIE	NY	14111-
CITY OF INDUSTRY	LOS ANGELES	CA	91748-
PATERSON	PASSAIC	NJ	07503-
HOLYOKE	HAMPDEN	MA	01040-
CHICAGO	COOK	IL	60652-
GRAND PRAIRIE	TARRANT	TX	75050-
SOUTH PITTSBURG	MARION	TN	37380-
KIELER	GRANT	WI	53812-
BENSENVILLE	COOK	IL	60106-
YORK	YORK	PA	17408-
FORTVILLE	HANCOCK	IN	46040-
DOWNINGTOWN	CHESTER	PA	19335-
SANFORD	YORK	ME	04073-
AMELIA	CLERMONT	OH	45102-
ROCHESTER	MONROE	NY	14624-

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42.60125	-78.93605
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39.935227	-85.836546
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5080	110001948420	325612		
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QUESTSPECIALTY CORP
CHEMETALL US INC
ROYAL CHEMICAL CO
TRICHROMATIC WEST
COLGATE PALMOLIVE CO
TRI-STAR INDUSTRIAL PRODUCTS
HOCKING INTERNATIONAL LABORATORIES LLC
SWISHER HYGIENE INC
CHEMSTATION MEMPHIS
CHEMSTATION DAYTON
FAS-PAK INC
FAS-PAK INC
SC JOHNSON & SON INC WAXDALE FACILITY
BETCO CORP
ZEP COMMERCIAL
UNITED LABORATORIES INC
AMREP INC
JAMES AUSTIN CO
JAMES AUSTIN CO
HILLYARD INDUSTRIES INC
SIMONIZ USA INC
EXCELDA MANUFACTURING HOLDING LLC - BRIGHTON A
FREMONT INDUSTRIES INC
JAMES AUSTIN CO
ALPHA CHEMICAL SERVICES INC
M D STETSON CO
ROEBIC LABORATORIES INC
KIK (VIRGINIA) LLC
KIK (GEORGIA) LLC
JAMES AUSTIN CO
LAWTON BROTHERS INC
MALCO PRODUCTS INC
MALCO PRODUCTS INC
THETFORD CORP
PREMIERE PACKAGING INC
PROACTIVESOLUTIONS USA LLC
ANDERSON CHEMICAL CO
BUCKEYE INTERNATIONAL INC
KIK (HOUSTON) INC
GENLABS
NCH CORP MOHAWK LABS DIV
ABC COMPOUNDING CO OF TEXAS INC
AUTO WAX CO
SHEPARD BROS INC
DYNASOL INC
NCH CORP MOHAWK LABS DIV
EASIWAY SYSTEMS INC

2001 E TOM GREEN ST
1100 TECHNOLOGY DR
1336 CROWE RD
6070 RICKENBACKER ROAD
200 CENTENNIAL COURT
12049 REGENTVIEW AVE
980 RANCHEROS DR
516 MONCEAUX RD
3145 BELLBROOK CENTER DR
2360 W DOROTHY LN
401 DARLINGTON ST
411 FAIRFIELD AVE
8311 16TH ST
1001 BROWN AVE
350 JOE FRANK HARRIS PKWY
320 37TH AVE
990 IND US TRIAL PARK DR
124 COMMERCE BOULEVARD
115 DOWNIEVILLE RD
402 N 3TH ST
201 BOSTON TURNPIKE
12785 EMERSON DR
4400 VALLEY INDUSTRIAL BLVD N
203 W AVE
46 MORTON ST
92 YORK AVENUE
25 CONNAIR RD
27 MILL LN
75 PINE VIEW DR
1560 LEXINGTON AVE
2515 DINNEEN AVE
361 FAIRVIEW AVE
393 W WILBETH RD
7101 JACKSON RD
6220 LEHMAN DR
301 BRIDGE ST
405 S HUBBARD
2700 WAGNER PL
2921 CORDER ST
5568 SCHAEFER AVE
932 KIFER RD
1102 AVE J E
1300 ROUND TABLE DR
503 S CYPRESS ST.
330 PINE ST.
34 STOUTS LN
540 SOUTH RIVER STREET

BRENHAM	WASHINGTON	TX	77833-
JACKSON	JACKSON	MI	49201-
EAST STROUDSBURG	MONROE	PA	18301-
COMMERCE	LOS ANGELES	CA	90040-
MORRISTOWN	HAMBLEN	TN	37813-
DOWNEY	LOS ANGELES	CA	90241-
SAN MARCOS	SAN DIEGO	CA	92069-
WEST PALM BEACH	PALM BEACH	FL	33405-
MEMPHIS	SHELBY	TN	38116-
DAYTON	MONTGOMERY	OH	45439-
LA PORTE	LAPORTE	IN	46350-
MICHIGAN CITY	LAPORTE	IN	46360-
STURTEVANT	RACINE	WI	53177-
TOLEDO	LUCAS	OH	43607-
EMERSON	BARTOW	GA	30137-
SAINT CHARLES	KANE	IL	60174-
MARIETTA	COBB	GA	30062-
STATESVILLE	IREDELL	NC	28625-
MARS	BUTLER	PA	16046-
SAINT JOSEPH	BUCHANAN	MO	64501-
BOLTON	TOLLAND	CT	06043-
BRIGHTON	LIVINGSTON	MI	48116-
SHAKOPEE	SCOTT	MN	55379-
LUDLOW	HAMPDEN	MA	01056-
STOUGHTON	NORFOLK	MA	02072-
RANDOLPH	NORFOLK	MA	02368-
ORANGE	NEW HAVEN	CT	06477-
SALEM	ROANOKE	VA	24153-
HAMPTON	HENRY	GA	30228-
DELAND	VOLUSIA	FL	32724-
ORLANDO	ORANGE	FL	32804-
BARBERTON	SUMMIT	OH	44203-
AKRON	SUMMIT	OH	44301-
ANN ARBOR	WASHTENAW	MI	48103-
FLINT	GENESEE	MI	48507-
GREEN BAY	BROWN	WI	54303-
LITCHFIELD	MEEKER	MN	55355-
MARYLAND HEIGHTS	ST LOUIS	MO	63043-
HOUSTON	HARRIS	TX	77054-
CHINO	SAN BERNARDINO	CA	91710-
SUNNYVALE	SANTA CLARA	CA	94086-
GRAND PRAIRIE	TARRANT	TX	75050-
DALLAS	DALLAS	TX	75247-
LA HABRA	ORANGE	CA	90631-
CANTON	NORFOLK	MA	02021-
MONMOUTH JUNCTION	MIDDLESEX	NJ	08852-
DELANO	WRIGHT	MN	55328-

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CONNOISSEURS PRODUCTS CORP
WEPAK CORP
CLOROX MANUFACTURING CO OF PUERTO R ICO INC.
CHEMETALL US INC (FKA OAKITE PRODUCTS INC)
AMERICAN WAX CO
GRANITIZE PRODUCTS INC
SEWELL PRODUCTS OF FLORIDA LLC
SHIELD PACKAGING CO INC
PDQ MANUFACTURING INC
WHINK PRODUCTS CO
NARCO
CRAWFORD PLANT
NCH CORP MOHAWK LABS DIV
INNOVATIVE CHEMICAL TECHNOLOGIES INC
EVONIK CORP
FOUR COLORS (DIVISION OF FIBRO CHEM LLC)
MFG CHEMICAL INC
MFG CHEMICAL INC BROOKS ROAD
MFG CHEMICAL INC CALLAHAN ROAD
SOLVAY USA INC
OXITENO USA LLC
PILOT CHEMICAL CO MIDDLETOWN OHIO FACILITY
CEKAL SPECIALTIES INC
CLARIANT CORP-MOUNT HOLLY WEST PLANT
ARROCHEM INC
INNOSPEC PERFORMANCE CHEMICALS
SOLVAY USA INC
BASF CORP
OMEGA CHEMICALS INC
HOLLY OAK CHEMICAL INC
SOLVAY USA INC
SOUTHERN CHEMICAL & TEXTILES INC
PILOT CHEMICAL CO LOCKLAND FACILITY
ABITEC CORP JANESVILLE PLANT
SOLVAY USA INC
SOLVAY USA INC
ADJUVANTS UNLIMITED LLC
SUN PRODUCTS CORP TEXAS
MARLIN CO INC
ZSCHIMMER & SCHWARZ
CST-PPC PLANT 7000
NEASE CO LLC
BASF CORP MAULDIN PLANT
SOLVAY USA INC PASADENA TX PLANT
VI-JON INC
ALTADIS USA INC
VI-JON INC

17 PRESIDENTIAL WAY
314 W BLAND ST
RD 1 KM 27.1 RAMAL 798 BO. RIO CANAS
16961 KNOTT AVE
39-30 REVIEW AVE
11022 VULCAN ST
909 MAGNOLIA AVE
50 OXFORD AVE
201 VICTORY CIR
1901 15TH AVE
519 HUFFINES BLVD
1450 ATHENS RD
2730 CARL RD
103 WALNUT GROVE RD
914 E RANDOLPH RD
1521 E WALNUT AVE
1804 KIMBERLY PARK DR
1200 BROOKS RD
453 CALLAHAN RD
3440 FAIRFIELD AVE
9801 BAY AREA BLVD
3439 YANKEE RD
101 BRICKYARD RD
625 E CATAWBA AVE
201 WESTLAND FARM RD
500 HINKLE LANE
399 SIMS CHAPEL RD
3455 SOUTHPORT RD
5077 S MAIN ST
101 CASE ST
577 BANKHEAD HWY
653 PEEK RD
606 SHEPHERD DR
1530 S JACKSON ST
20851 S SANTA FE AVE
2ND ST & BLUEBALL AVE
3633 CHARLES PAGE BLVD
12400 BAY AREA BLVD
1333 VIRGINIA ST
70 GA HWY 22 W
14292 KOALSTAD ROAD
10740 PADDYS RUN RD
1520 OLD STAGE RD
5761 UNDERWOOD RD SUITE B
1 SWAN DR
1000 TRESCKOW RD
8515 PAGE AVE

WOBURN	MIDDLESEX	MA	01801-
CHARLOTTE	MECKLENBURG	NC	28203-
CAGUAS	CAGUAS	PR	00725-
LA MIRADA	LOS ANGELES	CA	90638-
LONG ISLAND CITY	QUEENS	NY	11101-
SOUTH GATE	LOS ANGELES	CA	90280-
AUBURNDALE	POLK	FL	33823-
DUDLEY	WORCESTER	MA	01571-
ELLIJAY	GILMER	GA	30540-
ELDORA	HARDIN	IA	50627-
LEWISVILLE	DENTON	TX	75056-
CRAWFORD	OGLETHORPE	GA	30630-
IRVING	DALLAS	TX	75062-
CARTERSVILLE	BARTOW	GA	30120-
HOPEWELL	HOPEWELL (CITY)	VA	23860-
DALTON	WHITFIELD	GA	30721-
DALTON	WHITFIELD	GA	30720-
DALTON	WHITFIELD	GA	30721-
DALTON	WHITFIELD	GA	30721-
BALTIMORE	BALTIMORE (CITY)	MD	21226-
PASADENA	HARRIS	TX	77507-
MIDDLETOWN	BUTLER	OH	45044-
MOUNT HOLLY	GASTON	NC	28120-
MOUNT HOLLY	GASTON	NC	28120-
MOUNT HOLLY	GASTON	NC	28120-
SALISBURY	ROWAN	NC	28144-
SPARTANBURG	SPARTANBURG	SC	29306-
SPARTANBURG	SPARTANBURG	SC	29302-
COWPENS	SPARTANBURG	SC	29330-
FOUNTAIN INN	GREENVILLE	SC	29644-
WINDER	BARROW	GA	30680-
DALTON	WHITFIELD	GA	30721-
LOCKLAND	HAMILTON	OH	45215-
JANESVILLE	ROCK	WI	53546-
LONG BEACH	LOS ANGELES	CA	90810-
MARCUS HOOK	DELAWARE	PA	19061-
TULSA	TULSA	OK	74127-
PASADENA	HARRIS	TX	77507-
LENOIR	CALDWELL	NC	28645-
MILLEDGEVILLE	BALDWIN	GA	31061-
CONROE	MONTGOMERY	TX	77302-
HARRISON	HAMILTON	OH	45030-
MAULDIN	GREENVILLE	SC	29662-
PASADENA	HARRIS	TX	77507-
SMYRNA	RUTHERFORD	TN	37167-
MCADOO	CARBON	PA	18237-
SAINT LOUIS	ST LOUIS	MO	63114-

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33.88725	-83.17806
32.842889	-96.929722
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37.292778	-77.267833
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39.236111	-84.461667
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33.843611	-118.216389
39.809349	-75.422059
36.14798	-96.03401
29.640467	-95.046918
35.88465	-81.56351
33.092043	-83.278521
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39.27666	-84.6913
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5174	110031001127	325910		
5175	110063690901	325910		
5176	110067272365	325910		

TAKASAGO INTERNATIONAL CORP
TEVCO ENTERPRISES INC
PHARMA TECH INDUSTRIES
PROCTER & GAMBLE HAIR CARE LLC
NOXELL CORP
PROFESSIONAL DISPOSABLES INTERNATIONAL INC
MARY KAY INC
MARIETTA CORP
BASF CORP
AVEDA CORP
ARAMIS INC LEN-RON MANUFACTURING DIV
AMERICAN BLENDING & FILLING
COMBE PRODUCTS INC
BURT'S BEES MANUFACTURING
NICE-PAK PRODUCTS INC
PHARMETIC MANFACTURING CO
NICE PAK PRODUCTS INC
PALMETTO IMAGING TECHNOLOGY L LC
SUPERIOR PRINTING INK CO INC
GOTHAM INK CORP
DUPONT ROCHESTER SENECA AVE
ENVIRONMENTAL INKS - A MEMBER OF THE SIEGWERK GROUP
FLINT GROUP PIGMENTS
LIOCHEM INC
FLINT GROUP NA CORP
OBRON ATLANTIC CORP
INDEPENDENT INK INC
FLINT GROUP NA CORP
FLINT GROUP NA CORP
EPSON PORTLAND INC
AMERICAN INKS & COATING CORP
SUN CHEMICAL CORP
GEM GRAVURE CO INC
FLINT GROUP NA CORP
INX INTERNATIONAL INK CO
XEROX CORP
SUN CHEMICAL CORP
FUJIFILM IMAGING COLORANTS INC
EPSON EL PASO INC
INTERNATIONAL COATINGS CO INC
POLYMERIC IMAGING INC
INX INTERNATIONAL INK CO
CABOT CORP
AMERICAN INKS & COATINGS
ELECTRONICS FOR IMAGING INC
INX INTERNATIONAL INK CO
HP INTERNATIONAL TRADING BV (PUERTO RICO BRANCH) LLC

114 COMMERCE DRIVE
110 POMPONIO AVE
545 OLD ELBERT RD
2200 LOWER MUSCATINE RD
93 BEAVER CT
TWO NICE-PAK PARK
1330 REGAL ROW
4633 S DOWNEY RD
361 SHEEP PASTURE ROAD
4000 PHEASANT RIDGE DR NE
350 S SERVICE RD
3505 BIRCHWOOD DRIVE
EL DUQUE INDUSTRIAL PARK RD 971 ST A
701 DISTRIBUTION DR
ONE NICE-PAK ROAD
650 JERNEE MILL RD
1 NICE PAK RD
1214 STATE HWY 34E
750 SHERMAN AVE
19 HOLT DR
69 SENECA AVE
1 QUALITY PRODUCTS RD
224 PARKER DR
2145 E PARK DR
104 NATIONAL DR
830 E ERIE ST
14705 S AVALON BLVD
210 PHILIPS RD
106 TRIANGLE DR
3950 NW ALOCLEK PLACE
120 REGENT DR
16000 CONTINENTAL BLVD
112 SCHOOL ST
2675 HENKLE DR
13821 MARQUARDT AVENUE
27063 SW CANYON CREEK RD.
125 JAY GEE DR
233 CHERRY LN
1211 HENRY BRENNAN
13929 E 166TH ST
117 E 14TH AVE
10820 WITHERS PARK DR
50 ROGERS ROAD
3400 N HUTCHINSON ST
1260 JAMES L HART PKWY
350 HOMAN RD
CARR 110, KM. 5.1

HARRIMAN	ORANGE	NY	10926-
SOUTH PLAINFIELD	MIDDLESEX	NJ	07080-
ROYSTON	HART	GA	30662-
IOWA CITY	JOHNSON	IA	52240-
HUNT VALLEY	BALTIMORE	MD	21030-
ORANGEBURG	ROCKLAND	NY	10962-
DALLAS	DALLAS	TX	75247-
VERNON	LOS ANGELES	CA	90058-
EAST SETAUKET	SUFFOLK	NY	11733-
MINNEAPOLIS	ANOKA	MN	55449-
MELVILLE	SUFFOLK	NY	11747-
WAUKEGAN	LAKE	IL	60085-
NAGUABO	NAGUABO	PR	00718-
DURHAM	DURHAM	NC	27709-
MOORESVILLE	MORGAN	IN	46158-
SAYREVILLE	MIDDLESEX	NJ	08872-
JONESBORO	CRAIGHEAD	AR	72404-
WINNSBORO	FAIRFIELD	SC	29180-
HAMDEN	NEW HAVEN	CT	06514-
STONY POINT	ROCKLAND	NY	10980-
ROCHESTER	MONROE	NY	14621-
MORGANTON	BURKE	NC	28655-
BEAUFORT	BEAUFORT	SC	29906-
CONYERS	ROCKDALE	GA	30013-
ANNISTON	CALHOUN	AL	36207-
PAINESVILLE	LAKE	OH	44077-
GARDENA	LOS ANGELES	CA	90248-
LIONVILLE	CHESTER	PA	19341-
WEYERS CAVE	AUGUSTA	VA	24486-
HILLSBORO	WASHINGTON	OR	97124-
WINSTON SALEM	FORSYTH	NC	27103-
COLONIAL HEIGHTS	COLONIAL HEIGHTS (CITY)	VA	23834-
WEST HANOVER	PLYMOUTH	MA	02339-
LEBANON	WARREN	OH	45036-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
WILSONVILLE	CLACKAMAS	OR	97070-
FRANKLIN	WARREN	OH	45005-
NEW CASTLE	NEW CASTLE	DE	19720-
EL PASO	EL PASO	TX	79936-
CERRITOS	LOS ANGELES	CA	90703-
NORTH KANSAS CITY	CLAY	MO	64116-
CHARLOTTE	MECKLENBURG	NC	28278-
HAVERHILL	ESSEX	MA	01835-
WHITE HALL	JEFFERSON	AR	71602-
YPSILANTI	WASHTENAW	MI	48197-
LEBANON	WARREN	OH	45036-
AGUADILLA	AGUADILLA	PR	00603-

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5220	110000312368	325991	14578711	
5221	110000317899	325991		
5222	110000318086	325991		
5223	110000318237	325991		

SCHLUMBERGER ROSHARON CAMPUS
ORICA NITROGEN LLC
ORICA USA INC-GALENA SITE
ORICA USA INC SELLERSBURG IN
DYNO NOBEL INC
NELSON BROTHERS LLC PARRISH
WAMPUM HARDWARE CO
AUSTIN POWDER CO
VIKING EXPLOSIVES LLC
T K HOLDINGS INC
BOREN EXPLOSIVES CO INC
NELSON BROTHERS MINING SERVICES LLC
VIKING EXPLOSIVES LLC
ACTION MANUFACTURING CO
US DOE PANTEX PLANT
NELSON BROTHERS LLC - CHEROKEE
NAMMO TALLEY INC
DYNO NOBEL INC
ORICA USA INC-GOLD HILL
ORICA USA INC
ORICA USA INC - GREEN BAY
OWEN OIL TOOLS LP
HALLOWELL MANUFACTURING LLC
ACTION MANUFACTURING CO
HODGDON POWDER CO HERINGTON FACILITY
AUSTIN POWDER CO
ORICA USA INC-CLEARFIELD PA
DYNO NOBEL INC
HUNTING TITAN-MILFORD
ORICA USA INC
NELSON BROTHERS LLC
ALLIANT TECHSYSTEMS OPERATIONS LLC (NEW RIVER ENERGETICS)
AMETEK CHEMICAL PRODUCTS DIV
COVESTRO LLC (FORMALLY BAYER MATERIALSCIENCE)
LORD CORP
MITSUBISHI RAYON CARBON FIBER & COMPOSITES INC
SEALED AIR
POLYSOURCE INC
NATIONAL PLASTICS COLOR INC
ORICA GROUND SUPPORT
HUDSON COLOR CONCENTRATES LLC
S&E SPECIALTY POLYMERS LLC
CLARIANT PLASTICS & COATINGS USA INC - HOLDEN FACILITY
TEKNOR APEX CO
GENERAL PLASTICS INC
SAFAS CORP
O'NEIL COLOR & COMPOUNDING

14910 AIRLINE RD
7700 W DUPONT RD
5755 N SANDRIDGE RD
6702 UTICA SELLERSBURG RD
660 HOPMEADOW ST
500 OLD BALTIMORE RD
60711 DYNAMITE RD
430 POWDER PLANT RD
2178 HILITE RD
9138 RANDOLPH RD NE
8425 HWY 269
2115 BISHOP RD
4469 HWY 5
190 RITTENHOUSE CIRCLE
955 FM-2373
2120 INDUSTRIAL DR
3520 N GREENFIELD RD
5392 VERMILION TRAIL
2075 HIGH ROCK RD
1402 MARSHBURN RD
N 4693 COUNTY RD E
12001 COUNTY RD 1000
3600 NW 74TH ST
500 BAILEY CROSSROADS RD
1347 S 2600 RD
9605 N UMPQUA HWY
1442 18 HOLLOW RD
9045 COUNTY RD 476
143 HCR 4361
971 MOUNTAIN ROAD
42 OLD COUNTY RD
RT 114 RADFORD ARMY AMMUNITION PLANT
42 MOUNTAIN AVE
2400 SPRING STUEBNER RD
5101 E 65TH ST
1822 REYNOLDS AVE
10 OLD SHERMAN TURNPIKE
555 E STATLER RD
100 INDUSTRIAL ST
150 CARLEY CT
50 FRANCIS ST
140 LEOMINSTER-SHIRLEY RD
85 INDUSTRIAL DR
505 CENTRAL AVE
55 LA FRANCE AVE
2 ACKERMAN AVE
61 RIVER DR

ROSHARON	BRAZORIA	TX	77583-
MORRIS	GRUNDY	IL	60450-
EAST DUBUQUE	JO DAVIESS	IL	61025-
SELLERSBURG	CLARK	IN	47172-
SIMSBURY	HARTFORD	CT	06070-
PARRISH	WALKER	AL	35580-
SALESVILLE	GUERNSEY	OH	43778-
MC ARTHUR	VINTON	OH	45651-
GILLETTE	CAMPBELL	WY	82718-
MOSES LAKE	GRANT	WA	98837-
PARRISH	WALKER	AL	35580-
GILLETTE	CAMPBELL	WY	82717-
HIBBING	ST LOUIS	MN	55746-
BRISTOL	BUCKS	PA	19007-
PANHANDLE	CARSON	TX	79068-
CHEROKEE	COLBERT	AL	35616-
MESA	MARICOPA	AZ	85215-
BIWABIK	ST LOUIS	MN	55708-
GOLD HILL	ROWAN	NC	28071-
HOMER	BANKS	GA	30547-
KAUKAUNA	OUTAGAMIE	WI	54130-
GODLEY	JOHNSON	TX	76044-
COLUMBUS	CHEROKEE	KS	66725-
ATGLEN	CHESTER	PA	19310-
HERINGTON	MORRIS	KS	67449-
ROSEBURG	DOUGLAS	OR	97470-
CLEARFIELD	CLEARFIELD	PA	16830-
ISHPEMING	MARQUETTE	MI	49849-
MILFORD	HILL	TX	76670-
BLOOMSBURG	COLUMBIA	PA	17815-
QUINCY	LEWIS	KY	41166-
RADFORD	MONTGOMERY	VA	24141-
NESQUEHONING	CARBON	PA	18240-
SPRING	HARRIS	TX	77389-
INDIANAPOLIS	MARION	IN	46220-
IRVINE	ORANGE	CA	92614-
DANBURY	FAIRFIELD	CT	06810-
PIQUA	MIAMI	OH	45356-
VALLEY CENTER	SEDGWICK	KS	67147-
GEORGETOWN	SCOTT	KY	40324-
LEOMINSTER	WORCESTER	MA	01453-
LUNENBURG	WORCESTER	MA	01462-
HOLDEN	WORCESTER	MA	01520-
PAWTUCKET	PROVIDENCE	RI	02861-
BLOOMFIELD	ESSEX	NJ	07003-
CLIFTON	PASSAIC	NJ	07011-
GARFIELD	BERGEN	NJ	07026-

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38.19861	-84.5447
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5254	110000458594	325991		
5255	110000459156	325991		
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5268	110001129519	325991		
5269	110001259799	325991		
5270	110001367217	325991		

COLORITE PLASTICS CO
RIMTEC CORP
SOLEPOXY INC
WASHINGTON PENN PLASTIC CO INC ARDEN
POLYONE CORP
ORICA GROUND SUPPORT
ALPHAGARY CORP
AMPACET CORP
STANDRIDGE COLOR CORP
CALHOUN PLASTICS & CHEMICALS
KW PLASTICS
POLYONE CLINTON
TECHMER PM LLC
COLORTECH INC
EQUISTAR CHEMICALS LP
NEWARK COMPOUNDING FACILITY
AMPACET CORP
A SCHULMAN INC
MCPP - BELLEVUE
POLYONE CORP NORTH BALTIMORE
GENERAL CABLE INDUSTRIES INC
DSM ENGINEERING PLASTICS
POLYONE CORP
AMPACET CORP
CLARIANT PLASTICS & COATINGS USA INC - ALBION FACILITY
MILLER WASTE MILLS (DBA RTP CO)
FOAM SUPPLIES INC
POLY ONE CORP
AMPACET CORP
FOAM SUPPLIES INC
TEKNOR COLOR CO
AMERICHEM INC MTX
RTP CO
QEP INC
DOW CHEMICAL CO GENERAL LATEX & CHEMICAL CORP
TEKNOR APEX CO
KW PLASTICS OF CALIFORNIA
O'NEIL COLOR & COMPOUNDING
AXIALL LLC
DUPONT LITTLE HOCKING SERVICE CENTER
POLY ONE CORP
SUMITOMO BAKELITE NA INC
SACO AEI POLYMERS INC
R&D MARBLE INC
TECHMER PM OH
ADELL PLASTICS
CHEMTRUSION INC

101 RAILROAD AVE
1702 BEVERLY RD
211 FRANKLIN STREET
2080 N MAIN ST
2513 HIGHLAND AVE
394 SHOTT CT
9635 INDUSTRIAL DR
100 AMPACET DR
145 STANDRIDGE DR
1139 NEWTOWN LOOP NE
100 SANDERS RD
1260 CARDEN FARM DR
1 QUALITY CIR
5712 COMMERCE BLVD
1035 FLEX DR
1111 O'NEILL DR S E
1855 JAMES PKWY
103 RAILROAD AVE
350 N BUCKEYE ST
733 E WATER ST
7950 ROCKVILLE RD
2267 W MILL RD
3100 N 35TH ST
3701 N FRUITRIDGE AVE
926 ELLIOTT RD
580 E FRONT ST
4387 N RIDER TRAIL
2700 PAPIN ST
125 AMPACET DR
590 BENJAMIN'S WAY
4545 N JACKSON
1300 FT WORTH ST
1301 JOEL E RD
11912 SHELDON ST
11266 JERSEY BLVD
420 SO 6TH AVE
1861 SUNNYSIDE CT
193 COMMERCE PL
20043 HWY 51
251 ARROWHEAD RD
5306 HWY 146
24 MILL ST
1395 DANNER DR
11743 N US HWY 75
38620 CHESTER RD
4530 ANNAPOLIS RD
1403 PORT ROAD

RIDGEFIELD	BERGEN	NJ	07657-
BURLINGTON	BURLINGTON	NJ	08016-
OLEAN	CATTARAUGUS	NY	14760-
WASHINGTON	WASHINGTON	PA	15301-
BETHLEHEM	NORTHAMPTON	PA	18020-
BLUEFIELD	MERCER	WV	24701-
PINEVILLE	MECKLENBURG	NC	28134-
CARTERSVILLE	BARTOW	GA	30120-
SOCIAL CIRCLE	WALTON	GA	30025-
CALHOUN	GORDON	GA	30701-
TROY	PIKE	AL	36079-
CLINTON	ANDERSON	TN	37716-
CLINTON	ANDERSON	TN	37716-
MORRISTOWN	HAMBLEN	TN	37814-
JACKSON	MADISON	TN	38301-
HEBRON	LICKING	OH	43025-
HEATH	LICKING	OH	43056-
STRYKER	WILLIAMS	OH	43557-
BELLEVUE	HURON	OH	44811-
NORTH BALTIMORE	WOOD	OH	45872-
INDIANAPOLIS	MARION	IN	46214-
EVANSVILLE	VANDERBURGH	IN	47720-
TERRE HAUTE	VIGO	IN	47804-
TERRE HAUTE	VIGO	IN	47804-
ALBION	CALHOUN	MI	49224-
WINONA	WINONA	MN	55987-
EARTH CITY	ST LOUIS	MO	63045-
SAINT LOUIS	ST LOUIS (CITY)	MO	63103-
DERIDDER	BEAUREGARD	LA	70634-
LEWISVILLE	DENTON	TX	75067-
JACKSONVILLE	CHEROKEE	TX	75766-
MANSFIELD	TARRANT	TX	76063-
FORT WORTH	TARRANT	TX	76140-
SUN VALLEY	LOS ANGELES	CA	91352-
RANCHO CUCAMONGA	SAN BERNARDINO	CA	91730-
CITY OF INDUSTRY	LOS ANGELES	CA	91746-
BAKERSFIELD	KERN	CA	93308-
JASPER	MARION	TN	37347-
HAZLEHURST	COPIAH	MS	39083-
LITTLE HOCKING	WASHINGTON	OH	45742-
SEABROOK	HARRIS	TX	77586-
MANCHESTER	HARTFORD	CT	06042-
AURORA	PORTAGE	OH	44202-
WILLIS	MONTGOMERY	TX	77378-
AVON	LORAIN	OH	44011-
BALTIMORE	BALTIMORE	MD	21227-
JEFFERSONVILLE	CLARK	IN	47130-

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5314	110022810582	325991		
5315	110024226407	325991		
5316	110024463347	325991		
5317	110024556229	325991		

TECHMER PM LLC ILLINOIS
POLYONE CORP
BOREALIS COMPOUNDS INC
AMETEK INC WESTCHESTER PLASTICS
IDI CARIBE INC
MEARTHANE PRODUCTS CORP
CARY COMPOUNDS LLC
AMERICHEM INC SCP
GSDI SPECIALTY DISPERSIONS INC
POLYONE CORP
ALAMO MARBLE LTD
SEEMANN COMPOSITES INC
CALIFORNIA CRAFTED MARBLE DBA CCM ENTERPRISES
SABIC INNOVATIVE PLASTICS
CLARIANT PLASTICS & COATINGS USA INC - PHOENIX FACILITY
TECHMER PM LLC
BCC PRODUCTS INC
RPS COMPOSITES OF ALABAMA INC
VI-CHEM CORP
EAGLE PACKAGING INC
POLYONE CORP NORWALK-OH
POLYONE CORP
CLUB KIT INC
LAYNE INLINER LLC
HUDSON COLOR CONCENTRATES LLC
ROYAL BATHS MANUFACTURING CO
AXIALL LLC
MESA FULLY FORMED LLC
RUTLAND PLASTIC TECHNOLOGIES INC
MANNER POLYMERS INC
KILLEEN MARBLE INC
3M TOMBALL
INNOVATIVE POLYMERS INC
ALTEC INDUSTRIES INC
POLYONE
THE MATRIXX GROUP INC DBA A SCHULMAN INC
SIKA CORP
MARCHEM CORP
EFI POLYMERS
TRINITY SPECIALTY COMPOUNDING
ENGINEERED COMPOSITES INC
SUMITOMO ELECTRIC INTERCONNECT PRODUCTS INC
HEE ENVIRONMENTAL ENGINEERING
MESA MARBLE & STONE CO INC DBA MARBLE-CRAFT
J-LOK CO
SYLVIN TECHNOLOGIES INC
SIPLAST - PMMA PRODUCTION

900 DOUGLAS RD
8155 COBB CENTER DR
176 THOMAS RD
14097 CEMETERY RD
PR3 KM 151.8 AGUIRRE
16 WESTERN INDUSTRIAL DR
5 NICHOLAS CT
155 E STEELS CORNERS RD
1675 NAVARRE RD SE
4403A PASADENA FWY
4931 ENTERPRISE
12481 GLASCOCK DR
10848 WHEATLANDS AVE.
945 S MARR RD
4425 EAST ELWOOD STREET
18420 S LAUREL PARK RD
2140 EARLYWOOD DR
8375 ZEIGLER BLVD
55 COTTAGE GROVE ST SW
3219 RIDER TRAIL SOUTH
80 NW ST
245 AVECOR DR
4242 31ST ST N
2531 JEWETT LN
6240 GROSS POINT RD
1144 B US CHONG RD
210 IND US TRIAL DR N
1111 S SIRRINE ST
10021 RODNEY ST
500 INTERCHANGE ST
450 F ROY REYNOLDS
11715 BOUDREAUX RD
208 KUNTZ ST
1009 VERNON ROAD
107 JACKSON ST
15000 US HWY 41 N
3400 TREE CT INDUSTRIAL BLVD
2500 ADIE RD
4600 HOLLY ST
600 OAK ST
55 ROBERTS AVE
915 ARMORLITE DR
16605 KOALA RD
702 W CARSON
626 GALLITZIN RD
84 DENVER RD
35 MCCELLAN BLVD

BATAVIA	KANE	IL	60510-
KENNESAW	COBB	GA	30152-
PORT MURRAY	WARREN	NJ	07865-
WAPAKONETA	AUGLAIZE	OH	45895-
SALINAS	SALINAS	PR	00751-
CRANSTON	PROVIDENCE	RI	02921-
DAYTON	MIDDLESEX	NJ	08810-
CUYAHOGA FALLS	SUMMIT	OH	44224-
MASSILLON	STARK	OH	44646-
PASADENA	HARRIS	TX	77503-
SAN ANTONIO	BEXAR	TX	78249-
GULFPORT	HARRISON	MS	39503-
SANTEE	SAN DIEGO	CA	92071-
COLUMBUS	BARTHOLOMEW	IN	47201-
PHOENIX	MARICOPA	AZ	85040-
RANCHO DOMINGUEZ	LOS ANGELES	CA	90220-
FRANKLIN	JOHNSON	IN	46131-
MOBILE	MOBILE	AL	36608-
GRAND RAPIDS	KENT	MI	49507-
EARTH CITY	ST LOUIS	MO	63045-
NORWALK	HURON	OH	44857-
VONORE	MONROE	TN	37885-
SAINT PETERSBURG	PINELLAS	FL	33714-
SANFORD	SEMINOLE	FL	32771-
NILES	COOK	IL	60714-
HOUSTON	HARRIS	TX	77039-
MADISON	MADISON	MS	39110-
MESA	MARICOPA	AZ	85210-
PINEVILLE	MECKLENBURG	NC	28134-
MCKINNEY	COLLIN	TX	75071-
KILLEEN	BELL	TX	76543-
TOMBALL	HARRIS	TX	77375-
SAINT JOHNS	CLINTON	MI	48879-
WATHENA	DONIPHAN	KS	66090-
DYERSBURG	DYER	TN	38024-
EVANSVILLE	VANDERBURGH	IN	47725-
KIRKWOOD	ST LOUIS	MO	63122-
MARYLAND HEIGHTS	ST LOUIS	MO	63043-
DENVER	DENVER	CO	80216-
WEST UNITY	WILLIAMS	OH	43570-
BUFFALO	ERIE	NY	14206-
SAN MARCOS	SAN DIEGO	CA	92069-
ADELANTO	SAN BERNARDINO	CA	92301-
BRYAN	BRAZOS	TX	77801-
CRESSON	CAMBRIA	PA	16630-
DENVER	LANCASTER	PA	17517-
ARKADELPHIA	CLARK	AR	71923-

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5363	110012282163	325992		
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FLEXABAR CORP
VENETIAN MARBLE OF LUBBOCK INC
GENERAL COLOR LLC
ADELL COMPOUNDING
ELECTRIC CABLE COMPOUNDS INC
NWP PLASTICS
AMERICHEM INC DGA
A SCHULMAN
AURORA PLASTICS INC
JLOK CORP
HEXA AMERICAS INC
W L GORE & ASSOCIATES INC
SYN-MAR PRODUCTS INC
MESA FULLY FORMED LLC-COOLIDGE
SOUTHWEST DISTRIBUTING CO
AXIALL LLC-PRAIRIE
POLYONE CORP
PREMIUM COMPOSITE TECHNOLOGY NA
STANDRIDGE COLOR CORP
CSP OF INDIANA LLC
TECHMER PM LLC
A SCHULMAN COLOR CENTER
LANXESS CORP
AMERICHEM INC LNC
LAYNE INLINER LLC
LAYNE INLINER LLC
LAYNE INLINER LLC - BAYTOWN
RAVAGO MANUFACTURING AMERICAS
COLORTECH INC
CLARIANT
RAVAGO MANUFACTURING AMERICAS
LAYNE INLINER LLC
ROYAL BATHS MANUFACTURING CO
ENPLAST AMERICAS
TEKNOR APEX - NORTH CAROLINA
AURORA PLASTICS - WELCOME PLANT
RICOH ELECTRONICS INC
CARESTREAM HEALTH INC - ISC B-117
SOLUTEK CORP
TOSHIBA AMERICA BUSINESS SOLUTIONS INC TONER PRODUCTS DIV
LEXMARK INTERNATIONAL INC
KODAK ALARIS COLORADO
CARESTREAM HEALTH INC
EASTMAN KODAK CO
ETERNAL TECHNOLOGY CORP
KODAK
HALLMARK REFINING CORP

1969 RUTGERS UNIVERSITY BLVD
2834 CLOVIS RD
350 BRIDGE ST
9813 JC SUMMERS LN
108 RADO DR
3220 CROCKER AVE
1015 ABUTMENT RD
1300 MCCABE RD
9280 JEFFERSON ST
880 SANDCUT ROAD
1150 S VANDEMARK RD
501 VIEVES WAY
5 NUTMEG DR
1349 W INDUSTRIAL DR
539 S DREW ST
10068 SUMMIT DR
MOORE & WALKER RD
2101 COMMERCE PARKWAY
235 KRAFT DRIVE
13811 ROTH RD
105 EAST TYLER STREET
8562 PORT JACKSON AVE NW
1225 GASTONIA TECHNOLOGY PKWY
7279 LIBERTY PARK AVE
4143 WEAVER CT S
7915 CHERRYWOOD LOOP
4701 DECKER DR.
13001 ALMEDA RD
5705 COMMERCE BLVD
675 WEGNER DR
405 PARK TOWER DR
4520 N STATE RD 37
7112 A BURNS ST
616 111TH ST
3518 DILLON RD
180 WELCOME CENTER BLVD
1125 HURRICANE SHOALS RD
1669 LAKE AVENUE, EASTMAN BUSINESS PARK, BUILDING
94 SHIRLEY ST
901 N FOSTER ST
6555 MONARCH RD
9952 EASTMAN PARK DR
8124 PACIFIC AVE
ONE POLYCHROME PARK
1800 TOUCHSTONE RD
2720 E FRONTAGE RD
1016 DALE LN

LAKEWOOD	OCEAN	NJ	08701-
LUBBOCK	LUBBOCK	TX	79415-
MINERVA	CARROLL	OH	44657-
DENHAM SPRINGS	LIVINGSTON	LA	70726-
NAUGATUCK	NEW HAVEN	CT	06770-
SHEBOYGAN	SHEBOYGAN	WI	53081-
DALTON	WHITFIELD	GA	30721-
LA PORTE	HARRIS	TX	77571-
STREETSBORO	PORTAGE	OH	44241-
EARLINGTON	HOPKINS	KY	42410-
SIDNEY	SHELBY	OH	45365-
ELKTON	CECIL	MD	21921-
ELLINGTON	TOLLAND	CT	06029-
COOLIDGE	PINAL	AZ	85228-
MESA	MARICOPA	AZ	85210-
PRAIRIE	MONROE	MS	39756-
AVON LAKE	LORAIN	OH	44012-
FRANKLIN	JOHNSON	IN	46131-
DALTON	WHITFIELD	GA	30721-
GRABILL	ALLEN	IN	46741-
DALTON	WHITFIELD	GA	30720-
NORTH CANTON	STARK	OH	44720-
DALLAS	GASTON	NC	28034-
LIBERTY	RANDOLPH	NC	27298-
HILLIARD	FRANKLIN	OH	43026-
KIOWA	ELBERT	CO	80117-
BAYTOWN	HARRIS	TX	77520-
HOUSTON	HARRIS	TX	77045-
MORRISTOWN	HAMBLEN	TN	37814-
WEST CHICAGO	DUPAGE	IL	60185-
MANCHESTER	COFFEE	TN	37355-
ORLEANS	ORANGE	IN	47452-
RICHLAND HILLS	TARRANT	TX	76118-
ARLINGTON	TARRANT	TX	76011-
JAMESTOWN	GUILFORD	NC	27282-
LEXINGTON	DAVIDSON	NC	27295-
LAWRENCEVILLE	GWINNETT	GA	30043-
ROCHESTER	MONROE	NY	14615-
BOSTON	SUFFOLK	MA	02119-
MITCHELL	DAVISON	SD	57301-
LONGMONT	BOULDER	CO	80503-
WINDSOR	WELD	CO	80550-
WHITE CITY	JACKSON	OR	97503-
COLUMBUS	MUSCOGEE	GA	31907-
COLONIAL HEIGHTS	CHESTERFIELD	VA	23834-
WEATHERFORD	CUSTER	OK	73096-
MOUNT VERNON	SKAGIT	WA	98273-

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35.43704	-86.0245
38.622034	-86.4556
32.795833	-97.2275
32.75132	-97.04943
35.9919	-79.93883
35.93484	-80.23533
33.98714	-83.95464
43.196959	-77.628233
42.3244	-71.07008
43.71833	-98.00744
40.092803	-105.20098
40.4652	-104.87035
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48.379633	-122.333123

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5366	110039414817	325992		
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5369	110000356114	325998 325510 324191		
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5374	110000371008	325998 424690 325320		
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5398	110000310413	325998		
5399	110000312616	325998		
5400	110000313045	325998		
5401	110000316916	325998		
5402	110000318601	325998		
5403	110000320625	325998		
5404	110000321401	325998		
5405	110000322491	325998		
5406	110000324499	325998	8377211	
5407	110000333997	325998		
5408	110000337118	325998		
5409	110000337387	325998		
5410	110000338803	325998		
5411	110000339367	325998		

EMD PERFORMANCE MATERIALS CORP
WHITE MOUNTAIN IMAGING
MSE TECHNOLOGIES LLC
ITW PRO BRANDS
ITW PRO BRANDS
EAGLE CHEMICALS INC
DOVER CHEMICAL CORP
FUJIFILM ELECTRONIC MATERIALS USA INC
CUSTOM SYNTHESIS LLC
NASHVILLE CHEMICAL & EQUIPMENT CO INC
FINGER LAKES CHEMICAL INC
BADGER MINING CORP TAYLOR COATING PLANT
BADGER MINING CORP MERRILLAN COATING PLANTS
MORTON SALT INC
JD STREETT & CO
M ARGUESO & CO INC - MICHI GAN
M ARGUESO & CO INC
AMERICHEM SALES CORP
KEMIRA CHEMICALS INC
KEMIRA CHEMICALS INC
FLOCRYL INC ACRYLAMIDE PLANT
CHEM TECHNOLOGIES LTD
PROSOCO INC
THE CHAMPION CO
COPPERHEAD CHEMICAL CO INC
VESUVIUS USA-CONNEAUT PLANT
INDIUM CORP OF AMERICA
ITW CHEMTRONICS
BAKER HUGHES INC
PROCHEM INC
STA TECHNOLOGIES INC
LUSTER-ON PRODUCTS INC
ROHM & HAAS ELECTRONIC MATERIA LS LLC
STAHL PC DIOLS
TECHNICAL INDUSTRIES INC
JOHN R HESS & CO INC
ENTHONE INC
WR GRACE & CO - CONN GRACE CONSTRUCTION PRODUCTS
PRESTONE PRODUCTS CORP
AMERICAN FLUX & METAL
AGILEX FLAVORS & FRAGRANCES
SURPASS CHEMICAL CO INC
STONER INC
FORCE INDUSTRIES DIVISON
NATIONAL FOAM INC
AGILENT TECHNOLOGIES INC - NEWPORT SITE
CITRUS & ALLIED ESSENCES LTD

50-70 MEISTER AVE
46 CHENELL DR
8201 WOODLEY AVENUE
805 E OLD 56 HWY
4647 HUGH HOWELL RD
2550 BOBMEYER RD
3676 DAVIS RD
6550 S MOUNTAIN RD
1704 DENVER RD
7001 WESTBELT DR
418-424 ST. PAUL ST
N7530 COUNTY ROAD P
W10899 CHERRY RD
151 S INDUSTRIAL ST
1 RIVER RD
2817 MCCRACKEN ST
12651 ELMWOOD AVENUE
340 N ST
1150 S 35TH ST
10930 DARRACOTT RD
3 CHEMICAL PLANT RD
14875 BONNER DR
3741 GREENWAY CIR
400 HARRISON ST
120 RIVER RD
1100 MAPLE AVE
1676 LINCOLN AVE
8125 COBB CENTER DR
707 N LEECH
5100 ENTERPRISE DR
5401 VENICE AVE NE
54 WALTHAM AVE
455 FOREST ST
13 CORWIN ST
217 CHURCH ST
400 STATION ST
350 FRONTAGE RD
2133 85TH ST
250 HALLS MILL RD
352 E FLEMING PIKE
130 INDUSTRIAL PKWY
1254 BROADWAY
1070 ROBERT FULTON HWY
28 INDUSTRIAL BLVD
350 E UNION ST
538 FIRST STATE BLVD.
4620 MERCEDES DR

SOMERVILLE	SOMERSET	NJ	08876-
CONCORD	MERRIMACK	NH	03301-
VAN NUYS	LOS ANGELES	CA	91406-
OLATHE	JOHNSON	KS	66061-
TUCKER	DEKALB	GA	30084-
HAMILTON	BUTLER	OH	45015-
DOVER	TUSCARAWAS	OH	44622-
MESA	MARICOPA	AZ	85212-
ANDERSON	ANDERSON	SC	29625-
NASHVILLE	DAVIDSON	TN	37209-
ROCHESTER	MONROE	NY	14605-
TAYLOR	JACKSON	WI	54659-
MERRILLAN	JACKSON	WI	54754-
RITTMAN	WAYNE	OH	44270-
SAINT LOUIS	ST LOUIS (CITY)	MO	63125-
MUSKEGON	MUSKEGON	MI	49441-
CLEVELAND	CUYAHOGA	OH	44111-
MASON	INGHAM	MI	48854-
WASHOUGAL	CLARK	WA	98671-
ABERDEEN	MONROE	MS	39730-
RICEBORO	LIBERTY	GA	31323-
MIDDLEFIELD	GEAUGA	OH	44062-
LAWRENCE	DOUGLAS	KS	66046-
SPRINGFIELD	CLARK	OH	45505-
TAMAQUA	SCHUYLKILL	PA	18252-
CONNEAUT	ASHTABULA	OH	44030-
UTICA	ONEIDA	NY	13502-
KENNESAW	COBB	GA	30152-
HOBBS	LEA	NM	88240-
ELLISTON	MONTGOMERY	VA	24087-
ALBUQUERQUE	BERNALILLO	NM	87113-
SPRINGFIELD	HAMPDEN	MA	01109-
MARLBOROUGH	MIDDLESEX	MA	01752-
PEABODY	ESSEX	MA	01960-
SOUTH KINGSTOWN	WASHINGTON	RI	02879-
CRANSTON	PROVIDENCE	RI	02910-
WEST HAVEN	NEW HAVEN	CT	06516
NORTH BERGEN	HUDSON	NJ	07047
FREEHOLD	MONMOUTH	NJ	07728
WINSLOW	CAMDEN	NJ	08095
SOMERVILLE	SOMERSET	NJ	08876
ALBANY	ALBANY	NY	12204-
QUARRYVILLE	LANCASTER	PA	17566-
PAOLI	CHESTER	PA	19301-
WEST CHESTER	CHESTER	PA	19382-
NEWPORT	NEW CASTLE	DE	19804-
BELCAMP	HARFORD	MD	21017-

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41.94108	-80.58623
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41.26524	-72.97846
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40.242056	-74.246722
39.67047	-74.843393
40.59838	-74.70929
42.67421	-73.73681
39.85947	-76.15314
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39.95939	-75.59717
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39.47898	-76.22792

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5421	110000358899	325998		
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5423	110000360118	325998		
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5427	110000375576	325998		
5428	110000381373	325998		
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5447	110000417781	325998		
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5451	110000432390	325998		
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5455	110000448873	325998		
5456	110000449042	325998		
5457	110000454071	325998		
5458	110000457657	325998		

COLONIAL METALS INC
CHEMTREAT INC
HUNTSMAN INTERNATIONAL LLC
SOUTHERN WATER TREATMENT CO INC
HARRELL INDUSTRIES INC
WR GRACE & CO - CONN GRACE CONSTRUCTION PRODUCTS
ANIMAL HEALTH & SCIENCES
BARBE AMERICA INC
SEYDEL COS JRS PLANT
HENKEL CORP
AMC INTERNATIONAL
SOLENIS LLC
SOLENIS LLC
WR GRACE & CO - CONN GRACE CONSTRUCTION PRODUCTS
ALLIED PHOTO OFFSET SUPPLY CORP
NITEO PRODUCTS LLC
HENKEL CORP
APPLIED SPECIALTIES INC
STP PRODUCTS MANUFACTURING CO
REVLIS CORP
STRUKTOL CO OF AMERICA
POLYMERICS INC
AMERICAN METAL CHEMICAL CORP
REVLIS CORP
AKRON DISPERSIONS INC COPLEY OH
CINCHEMPRO INC
MILACRON LLC
INTERCONTINENTAL CHEMICAL CORPORATION
ASTERION LLC
HAMMOND LEAD PRODUCTS & HAMMOND EXPANDERS DIVISIONS
BLUE GRASS CHEMICAL SPECIALTIE S LLC
MCGEAN-ROHCO INC
CUL-MAC INDUSTRIES INC
PARK METALLURGICAL CORP
LOCKHART CHEMICAL CO
HENKEL CORP
RBP CHEMICAL TECHNOLOGY INC
COLUMBUS CHEMICAL INDUSTRIES INC
HOH WATER TECHNOLOGY INC
PICO CHEMICAL CORP
PLAZE INC
AEROFIL TECHNOLOGY INC
DAYTON SUPERIOR CORP KC
CLARIANT CORP - RESERVE FACILITY
X-CHEM LLC
BACHMAN SERVICES INC AN INNOSPEC CO
PIERCE CHEMICALS/ROYAL BOND CO

505 BLUE BALL RD
10040 LICKINGHOLE RD
3400 WESTINGHO US E BLVD
2806 WHITE HORSE RD
2495 COMMERCE DR
6606 MARSHALL BLVD
100 CHRIS CALLIS PARKWAY
4208 W WHITE RD
244 JOHN B BROOKS RD
923 MAULDIN RD
310 BROOKHOLLOW IND BLVD
7525 NE IND US TRIAL BLVD
3000 LOUISVILLE RD
6445 W JONES AVE
2040 LEE ST
720 VAIDEN DR
421 LONDON RD
33555 PIN OAK PKWY
477 LEXINGTON AVE
2845 NEW PARK DR
201 E STEELS CORNERS RD
1540 ST CLAIR AVE
835 W SMITH RD
255 HUNTINGTON AVE
3291 SAWMILL RD
458 W MAIN ST
3000 DISNEY ST
4660 SPRING GROVE AVE
5425 W 84TH ST
2308 - 165TH ST
895 INDUSTRIAL BLVD
38521 SCHOOLCRAFT AVE
3720 S VENOY RD
8074 MILITARY AVE
4302 JAMES P COLE BLVD
420 W MARQUETTE AVE
150 S 118TH ST
N4335 TEMKIN RD
500 S VERMONT ST
400 E 16TH ST
1000 INTEGRAM DR
225 IND US TRIAL PARK DR
636 S 66TH TERRACE
334 ROSENWALD ST
6120 JEFFERSON HWY
2220 S PROSPECT AVE
4722 BRONZE WAY

ELKTON	CECIL	MD	21921-
ASHLAND	HANOVER	VA	23005-
CHARLOTTE	MECKLENBURG	NC	28273-
GREENVILLE	GREENVILLE	SC	29611-
ROCK HILL	YORK	SC	29730-
LITHONIA	DEKALB	GA	30058-
THOMASTON	UPSON	GA	30286-
OAKWOOD	HALL	GA	30566-
PENDERGRASS	JACKSON	GA	30567-
CALHOUN	GORDON	GA	30701-
DALTON	WHITFIELD	GA	30721-
MACON	BIBB	GA	31216-
SAVANNAH	CHATHAM	GA	31415-
ZELLWOOD	ORANGE	FL	32798-
HOLLYWOOD	BROWARD	FL	33020-
HERNANDO	DESOTO	MS	38632-
DELAWARE	DELAWARE	OH	43015-
AVON LAKE	LORAIN	OH	44012-
PAINESVILLE	LAKE	OH	44077-
NORTON	SUMMIT	OH	44203-
STOW	SUMMIT	OH	44224-
KENT	PORTAGE	OH	44240-
MEDINA	MEDINA	OH	44256-
AKRON	SUMMIT	OH	44306-
COPLEY	SUMMIT	OH	44321-
BATAVIA	CLERMONT	OH	45103-
CINCINNATI	HAMILTON	OH	45209-
CINCINNATI	HAMILTON	OH	45232-
INDIANAPOLIS	MARION	IN	46268-
HAMMOND	LAKE	IN	46320-
NEW ALBANY	FLOYD	IN	47150-
LIVONIA	WAYNE	MI	48150-
WAYNE	WAYNE	MI	48184-
DETROIT	WAYNE	MI	48204-
FLINT	GENESEE	MI	48505-
OAK CREEK	MILWAUKEE	WI	53154-
MILWAUKEE	MILWAUKEE	WI	53214-
COLUMBUS	DODGE	WI	53925-
PALATINE	COOK	IL	60067-
CHICAGO HEIGHTS	COOK	IL	60411-
PACIFIC	FRANKLIN	MO	63069-
SULLIVAN	FRANKLIN	MO	63080-
KANSAS CITY	WYANDOTTE	KS	66111-
RESERVE	ST JOHN THE BAPTIST	LA	70084-
HARAHAN	JEFFERSON PARISH	LA	70123-
OKLAHOMA CITY	OKLAHOMA	OK	73129-
DALLAS	DALLAS	TX	75236-

39.62119	-75.85156
37.70249	-77.4412
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41.595513	-87.473728
38.335224	-85.825523
42.38151	-83.42288
42.28085	-83.36314
42.35307	-83.1342
43.055218	-83.67675
42.91054	-87.91795
43.0296	-88.06036
43.351944	-88.999444
42.10128	-88.03744
41.50258	-87.61392
38.479742	-90.784939
38.226647	-91.172602
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30.07155	-90.57216
29.9396	-90.18957
35.44306	-97.48575
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5468	110000463935	325998		
5469	110000464514	325998		
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5472	110000469083	325998		
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5480	110000481639	325998	4195911	
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5505	110000700046	325998		

BERRYMAN PRODUCTS INC
POWER SERVICE PRODUCTS INC
WR GRACE & CO - CONN GRACE CONSTRUCTION PRODUCTS
SOUTH ATLANTIC SERVICES INC
BLENTECH CORP
SOLENIS INDUSTRIAL WATER DIV
DRILLING SPECIALTIES CO ALAMO PLANT
MACDERMID
ZXP TECHNOLOGIES LTD
GE WATER & PROCESS TECHNOLOGIES ORANGE FACILITY
ASHLAND SPECIALTY INGREDIENTS GP
TETRACO LLC
BENCHMARK ENERGY PRODUCTS LLC
CARGILL SALT
FOUR STAR CHEMICAL
WR GRACE & CO - CONN GRACE CONSTRUCTION PRODUCTS
POLYCHEMIE INC
PRESTONE PRODUCTS CORP
SIKA CORP
AIR PRODUCTS & CHEMICALS INC
CHEMICALS INC
GE WATER & PROCESS TECHNOLOGIES - BAKERSFIELD
DUPONT EKC TECHNOLOGY
MECS INC
BIO-RAD LABORATORIES INC
TOKYO OHKA KOGYO AMERICA INC
ORG CHEM GROUP LLC
BAKER PETROLITE CORP
ADVANTIS TECHNOLOGIES
PURITAN PRODUCTS INC
CHEMTREAT INC
CHEMTREAT INC ELDRIDGE IA
POLYCHEMIE INC
HARRY MILLER CORP
BULK CHEMICALS INC
FASLOC INC POTOMAC RIVER PLANT
MOBILE SOLVENT & SUPPLY
COLUMBIA CHEMICAL CORP
BERCEN INC SOUTHERN DIV
REEF SERVICES, LLC
M-I LLC-ZAVALLA
LAMBERTI USA INC
PACIFIC STANDARD SPECIALTIES INC
CH2O INC
HEXION INC
HACH CO
PYROTECHNIC SPECIALTIES INC

3800 E RANDOL MILL RD
513 PEASTER HWY
4323 CRITES ST
16530 PENINSULA BLVD
1305 RYE ST
6121 ALMEDA GENOA RD
5450 JEFFERSON CHEMICAL RD
223 N BROCKMAN
409 E WALLISVILLE RD
3901 WILLIAMS DR
ONE MILL ST
2500 W FRANCIS
4113 W INDUSTRIAL AVE
15100 W ROWLEY RD
3137 E. 26TH ST
7237 EAST GAGE AVE
4690 WORTH ST
19500 MARINER AVENUE
12767 E IMPERIAL HWY
1969 PALOMAR OAKS WAY
13560 COLOMBARD CT
3050 PEGASUS RD
2520 BARRINGTON CT
1778 MONSANTO WAY
3110 REGATTA BLVD
4600 NW BROOKWOOD PKWY
2410 LYNCH RD
16950 WALLISVILLE RD
1400 BLUEGRASS LAKES PKWY
2290 AVE A
4200 TWIN CITY HWY
200 TRAILS RD
10 STAUFFER IND US TRIAL PARK
4309 N LAWRENCE ST
OLD RT 61
447 DUPONT RD
5750 K US HLA MCLEOD RD
1000 WESTERN DR
30140 EDEN CHURCH RD
12032 HWY 155 N
207 CLAY PLANT RD
HWY 59 AT COUNTY RD 212
2281 N ARIZONA HWY 188
8820 OLD HWY 99 SE
45 ACFRAC ROAD
100 DAYTON AVE
1661 JUNIPER CREEK RD

ARLINGTON	TARRANT	TX	76011-
WEATHERFORD	PARKER	TX	76086-
HOUSTON	HARRIS	TX	77003-
HOUSTON	HARRIS	TX	77015-
HOUSTON	HARRIS	TX	77029-
HOUSTON	HARRIS	TX	77048-
CONROE	MONTGOMERY	TX	77301-
PASADENA	HARRIS	TX	77506-
HIGHLANDS	HARRIS	TX	77562-
ORANGE	ORANGE	TX	77630-
KENEDY	KARNES	TX	78119-
MIDLAND	MIDLAND	TX	79701-
MIDLAND	MIDLAND	TX	79703-
GRANTSVILLE	TOOELE	UT	84029-
VERNON	LOS ANGELES	CA	90058-
LOS ANGELES	LOS ANGELES	CA	90040-
LOS ANGELES	LOS ANGELES	CA	90063-
TORRANCE	LOS ANGELES	CA	90503-
SANTA FE SPRINGS	LOS ANGELES	CA	90670-
CARLSBAD	SAN DIEGO	CA	92011-
FONTANA	SAN BERNARDINO	CA	92337-
BAKERSFIELD	KERN	CA	93308-
HAYWARD	ALAMEDA	CA	94545-
MARTINEZ	CONTRA COSTA	CA	94553-
RICHMOND	CONTRA COSTA	CA	94804-
HILLSBORO	WASHINGTON	OR	97124-
EVANSVILLE	VANDERBURGH	IN	47711-
HOUSTON	HARRIS	TX	77049-
ALPHARETTA	FORSYTH	GA	30004-
BETHLEHEM	LEHIGH	PA	18017-
NEDERLAND	JEFFERSON	TX	77627-
ELDRIDGE	SCOTT	IA	52748-
TAYLOR	LACKAWANNA	PA	18517-
PHILADELPHIA	PHILADELPHIA	PA	19140-
MOHRSVILLE	BERKS	PA	19541-
MARTINSBURG	BERKELEY	WV	25404-
EIGHT MILE	MOBILE	AL	36613-
BRUNSWICK	MEDINA	OH	44212-
DENHAM SPRINGS	LIVINGSTON	LA	70726-
TYLER	SMITH	TX	75708-
ZAVALLA	ANGELINA	TX	75980-
HUNGERFORD	WHARTON	TX	77448-
GLOBE	GILA	AZ	85501-
OLYMPIA	THURSTON	WA	98501-
BRADY	MCCULLOCH	TX	76825-
AMES	STORY	IA	50010-
BYRON	PEACH	GA	31008-

32.75046	-97.04167
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38.02342	-122.053723
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CENTREVILLE PLANT
WR GRACE & CO - CONN GRACE CONSTRUCTION PRODUCTS
GE WATER & PROCESS TECHNOLOGIES BEAUMONT FACILITY
PRAXAIR SURFACE TECHNOLOGIES INC
COLONIAL CHEMICAL CO
AURORA SPECIALTY CHEMISTRIES
REMET PIC INC
ORG CHEM GROUP LLC
GARRATT-CALLAHAN CO BURLINGAME
TWINCO ROMAX
MEADWESTVACO OF VIRGINIA COVINGTON OPERATIONS
POLYSCIENCES INC
PPG EUCLID PRETREATMENT & SPECIALTY PRODUCTS
GARRATT-CALLAHAN CO FARMERS BRANCH
APEXICAL INC
BERKEBILE OIL CO INC
CRYSTAL PACKAGING INC
WSP SOLVAY GROUP
NOX-CRETE MANUFACTURING INC
COATEX INC
DOMINION CHEMICAL CO INC
HOH WATER TECHNOLOGY INC
DAYTON SUPERIOR (UNITEX)
CLARIANT BAKERSFIELD PLANT
CHEMTRADE SULFATE SOLUTIONS INC
FERRO ELECTRONIC MATERIAL SYSTEMS
HEATBATH CORP
REAGENTS HOLDINGS LLC
COVENTYA INC
INTELLIPAK LTD
CAMCO MANUFACTURING INC
CHEMGUARD INC
CERILLIANT CORP
THIRD COAST TERMINALS PEARLAND
FC PRO LLC
CHEMETRICS INC
ITW PROFESSIONAL AUTOMOTIVE PRODUCTS
SHAMROCK TECHNOLOGIES INC
BIOLAB INC
TATE & LYLE SUCRALOSE LLC
MOZEL COLUMBIA
CARGILL INC SALT DIV
MASTERS CO INC.
US WATER SERVICES
AMERICAN PHOENIX INC
WR GRACE & CO-CONN GRACE CONSTRUCTION PRODUCTS
FUJIFILM ULTRA PURE SOLUTIONS

700 HWY 33 S
FREEPORT CENTER, BUILDING J5
10658 HWY 90
1500 POLCO ST
78 CARRANZA RD
1520 LAKE LANSING RD
301 TURNER STREET
847 BLACKSNAKE RD
50 INGOLD RD
3100 W MILL RD
104 E. RIVERSIDE STREET
400 VALLEY RD
23000 ST CLAIR AVE
13721 WELCH RD
1905 NEW CUT RD
1216 RED BRANT RD
5185 NATIONAL WESTERN DR
400 W BROWN ST
1444 S 20TH ST
547 ECOLOGY LN
2050 PUDDLEDOCK RD
2008 N WESTPORT AVE
3101 GARDNER AVE
5501 DISTRICT BLVD
1055 N LOUISANA
1395 ASPEN WAY
107 FRONT ST
4746 SWEDEN ROAD
132 CLEAR RD
9988 KINSMAN RD
3075 ARNOLD RD NE
204 S 6TH AVE
811 PALOMA DR, SUITE A
1871 MYKAWA
19914 GH CIR
4295 CATLETT RD
3606 CRAFTSMAN BLVD
299 PACIFIC ST
1735 DOGWOOD DR
588 IND US TRIAL RD
1900 W GATE DR
27565 COUNTY RD 110 13 MILES NW OF FREEDOM
890 LIVELY BLVD
330 S CLEVELAND ST
5201 SW 11TH ST
350 MAGNOLIA DR
1200 W JACKSON RD

CENTREVILLE	WILKINSON	MS	39631-
CLEARFIELD	DAVIS	UT	84016-
BEAUMONT	JEFFERSON	TX	77713-
INDIANAPOLIS	MARION	IN	46224-
TABERNACLE	BURLINGTON	NJ	08088-
LANSING	INGHAM	MI	48912-
UTICA	HERKIMER	NY	13501-
HOT SPRINGS	GARLAND	AR	71913-
BURLINGAME	SAN MATEO	CA	94010-
MILWAUKEE	MILWAUKEE	WI	53209-
COVINGTON	COVINGTON (CITY)	VA	24426-9050
WARRINGTON	BUCKS	PA	18976-
EUCLID	CUYAHOGA	OH	44117-
FARMERS BRANCH	DALLAS	TX	75244-
SPARTANBURG	SPARTANBURG	SC	29303-
SOMERSET	SOMERSET	PA	15501-
DENVER	DENVER	CO	80216-
CASTANEA	CLINTON	PA	17726-
OMAHA	DOUGLAS	NE	68108-
CHESTER	CHESTER	SC	29706-
PETERSBURG	PETERSBURG (CITY)	VA	23803-
SIOUX FALLS	MINNEHAHA	SD	57107-
KANSAS CITY	JACKSON	MO	64120-
BAKERSFIELD	KERN	CA	93313-
CELINA	COLLIN	TX	75009-
VISTA	SAN DIEGO	CA	92081-
INDIAN ORCHARD	HAMPDEN	MA	01151-
CHARLOTTE	MECKLENBURG	NC	28273-
ORISKANY	ONEIDA	NY	13424-
NEWBURY	GEAUGA	OH	44065-
ALBANY	LINN	OR	97321-
MANSFIELD	TARRANT	TX	76063-
ROUND ROCK	WILLIAMSON	TX	78665-
PEARLAND	BRAZORIA	TX	77581-
WALLER	WALLER	TX	77484-
MIDLAND	FAUQUIER	VA	22728-
LAKELAND	POLK	FL	33803-
NEWARK	ESSEX	NJ	07114-
CONYERS	ROCKDALE	GA	30012-
MC INTOSH	WASHINGTON	AL	36553-
COLUMBIA	MONROE	IL	62236-
FREEDOM	WOODS	OK	73842-
WOOD DALE	DUPAGE	IL	60191-
CAMBRIDGE	ISANTI	MN	55008-
LAWTON	COMANCHE	OK	73501-
MOUNT PLEASANT	MAURY	TN	38474-
CARROLLTON	DALLAS	TX	75006-

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37.241199	-77.370621
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5597	110031000486	325998		
5598	110031262130	325998		
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SOUTH ATLANTIC SERVICES INC
ENERGY INTERMEDIATES INC
QUALICHEM INC
CORTEC CORP
AMERICAN JETWAY CORP
NCOC INC
QUES INDUSTRIES INC
COSMOPOLITON CHEMICAL CO
CAMCO MANUFACTURING INC
CHEM-PAK INC
SIGMA LIFE SCIENCES
LUBRIZOL OILFIELD CHEMISTRY LLC
EUCLID CHEMICAL
MICHELMAN INC
CHRYSO INC
M-I LLC
PHOENIX CHEMICAL CO
CHEMSON INC
CESI MANUFACTURING LLC
LUBRIZOL OILFIELD CHEMISTRY LLC
POWER LINE INDUSTRIES INC
DIPSOL OF AMERICA INC
THE STERNO GROUP LLC
JACAM MANUFACTURING 2013 LLC SOUTH PLANT
TM DEER PARK SERVICES LP
CUSTOM PROCESSING SERVICES INC
PLAZE INC
QUALITEK INTERNATIONAL INC
SURPASS CHEMICAL CO
SOUTHWIN LTD
ORG CHEM GROUP LLC
CENTRAL SOLUTIONS INC
PLAZE INC
COMPASS MINERALS AMERICA INC
POLYCHEMIE INC
EDEN CUSTOM PROCESSING LLC
ENVIRO TECH CHEMICAL SERVICES INC
EMCO CHEMICAL DISTRIBUTORS INC
COLOR MATRIX CORP
M ARGUESO & CO INC
FLOMIN INC
ULTRA ADDITIVES LLC
CAMCO MANUFACTURING INC
RICCA CHEMICAL CO LLC
IDQ OPERATING INC
NOVASTAR LP
BLAZE PRODUCTS

3527 HWY 421 N
5500 E HWY 80
2003 SALEM INDUSTRIAL DR
4119 WHITE BEAR PKWY
34136 MYRTLE
21251 MEYERS RD
5420 W 140TH ST
50-23 23RD ST
52650 LEER CT
242 CORNING WAY
9186 SIX PINES, SUITE 100
100 INDUSTRIAL DR (BLDG 180, 150, & 76)
1725 GUNN HWY
3023 E KEMPER RD BUILDINGS 2 & 3
10600 HWY 62 UNIT # 7
5750 HWY 90E
202 GEE RD
7825 HOLSTEIN AVE
1004 S PLAINSMAN RD
4420 S FLORES RD
14717 S HERITAGECREST WAY
34005 SCHOOLCRAFT RD
303 FALVEY BLVD
425 S 11TH ST
2525 BATTLEGROUND RD
2 BIRCHMONT DR
105 BOLTE LN
315 FAIRBANK ST
3 BRIDGE ST
272 NASHUA ST
11210 SOLOMON RD
401 FUNSTON RD
113 BOLTE LN
1662 AVE N
38070 VAN BORN RD
328 SUMMIT RD
500 WINMOORE WAY
2100 COMMONWEALTH AVE
680 N ROCKY RIVER DR
2628 RIVER AVE
7500 FM 1405
1455 BROAD ST SUITE 3
165 PIONEER DR
1490 LAMMERS PIKE
2901 KINGSLEY RD
2310 WOLFCAMP CIR
1101 ISAAC SHELBY DR

WILMINGTON	NEW HANOVER	NC	28401-
MIDLAND	MIDLAND	TX	79706-
SALEM	SALEM (CITY)	VA	24153-
WHITE BEAR LAKE	RAMSEY	MN	55110-
WAYNE	WAYNE	MI	48184-
OAK PARK	OAKLAND	MI	48237-
BROOK PARK	CUYAHOGA	OH	44142-
LONG ISLAND CITY	QUEENS	NY	11101-
ELKHART	ELKHART	IN	46514-
MARTINSBURG	BERKELEY	WV	25405-
THE WOODLANDS	MONTGOMERY	TX	77380-
LEETSDALE	ALLEGHENY	PA	15056-
ODESSA	PASCO	FL	33556-
SHARONVILLE	HAMILTON	OH	45241-
CHARLESTOWN	CLARK	IN	47111-
BROUSSARD	LAFAYETTE	LA	70518-
CALHOUN	GORDON	GA	30701-
PHILADELPHIA	PHILADELPHIA	PA	19153-
MARLOW	STEPHENS	OK	73055-
ELMENDORF	BEXAR	TX	78112-
BLUFFDALE	SALT LAKE	UT	84065-
LIVONIA	WAYNE	MI	48150-
TEXARKANA	BOWIE	TX	75501-
STERLING	RICE	KS	67579-
DEER PARK	HARRIS	TX	77536-
READING	BERKS	PA	19606-
SAINT CLAIR	FRANKLIN	MO	63077-
ADDISON	DUPAGE	IL	60101-
ALBANY	ALBANY	NY	12204-
LEOMINSTER	WORCESTER	MA	01453-
TROY	PERRY	IN	47588-
KANSAS CITY	WYANDOTTE	KS	66115-
SAINT CLAIR	FRANKLIN	MO	63077-
LYONS	RICE	KS	67554-
WAYNE	WAYNE	MI	48184-
EDEN	ROCKINGHAM	NC	27288-
MODESTO	STANISLAUS	CA	95358-
NORTH CHICAGO	LAKE	IL	60064-
BEREA	CUYAHOGA	OH	44017-
ROSEMEAD	LOS ANGELES	CA	91770-
BAYTOWN	CHAMBERS	TX	77523-
BLOOMFIELD	ESSEX	NJ	07003-
LEOMINSTER	WORCESTER	MA	01453-
BATESVILLE	RIPLEY	IN	47006-
GARLAND	DALLAS	TX	75041-
MIDLAND	MIDLAND	TX	79706-
SHELBYVILLE	SHELBY	KY	40065-

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HYDRODEC OF NA LLC
COLUMBUS CHEMICAL INDUSTRIES INC
X-CHEM LLC
OILFIELD SOLUTIONS INC
COVENTYA INC
MULTI-CHEM GROUP NEW FAIRVIEW TX FACILITY
FUJIFILM ELECTRONIC MATERIALS USA INC
THE EMBALMERS' SUPPLY CO
DOBER GROUP
US WATER SERVICES (DBA CHEMCAL INC)
EXCELDA MANUFACTURING HOLDING LLC - FOWLERVILLE
CATALYST OILFIELD SERVICES LLC
CAMCO MANUFACTURING INC
CLARIANT PLASTICS & COATINGS USA INC - MOORESVILLE FACILITY
LUBRIZOL OILFIELD CHEMISTRY LLC
SANFORD LP LIQUID MANUFACTURING & TECHNOLOGY CENTER
HEXION INC
TROY CHEMICAL INDUSTRIES INC
BRODY CHEMICAL
BASF TRILON M
SOUTHWIN - LIVONIA PLANT
KOST USA INC
CHRYSO INC
FLOW POLYMERS LLC
THE SOLBERG CO
SOUTHWIN/LTD
OMNI INDUSTRIAL SOLUTIONS INC
HALOX DIV OF ICL-PPLP
COMMERCIAL MERCHANDISING CORP
SPECIALTY SERVICES COMPLEX
MULTI-CHEM GROUP THREE RIVERS TX FACILITY
KUSTOM GROUP
INNOPHOS NUTRITION NORTH SALT LAKE
JACAM MANUFACTURING 2013 LLC NORTH PLANT
MULTI-CHEM GROUP SONORA TX FACILITY
NALCO CO
SOLID START INC
AISIN CHEMICAL INDIANA LLC
CHEMSICO
EMCO CHEMICAL DISTRIBUTORS INC
APISCENT LABS LLC
SUPERFLO INC
ALLNEX USA INC
SOUTHWIN LTD NEVADA
MULTI-CHEM GROUP MAURICE LA FACILITY
CHEMQUEST CHEMICALS LLC
ACP LABCHEM INC

2021 STEINWAY BLVD SE
4034 W. WASHINGTON AVE.
8220 STATE HWY 191
2614 S COUNTY RD 1257
4639 VAN EPPS ROAD
115 ILLINOIS LANE
80 CIRCUIT DR
5 COLTON ROAD
543 FORREST ROAD
635 WESTPORT PKWY SUITE 312
900 GARDEN LN
11999 E US HWY 158
2900 VANCE ST EXTENSION
337 TIMBER ROAD
5722 PROSPECT DRIVE
831 VOLUNTEER PARKWAY
3202 WINDMILL RD
17040 RAPIDS RD
6125 W DOUBLE EAGLE CIR
4201 DEGUSSA RD
11800 SEARS DR
1000 TENNESSEE AVE
1611 STATE HWY 276
17000 ST. CLAIR AVENUE, CIIC BUILDING 3
1520 BROOKFIELD AVE
630 106TH STREET
106 LTR PARK DRIVE
6530 SCHNEIDER AVE.
1337 J WOOD BRANCH DRIVE
233 HOYT ROAD
2630 HWY 72
3 CARBON WAY
680 N 700 W
1656 AVE Q
349 PR 4473
125 NALCO WAY/RT 65
3705 US HWY 98 S
1004 IND US TRIAL WAY
8494 CHAPIN IND US TRIAL DR
8601 95TH ST
4170 S NEVADA AVE
4625 LEE HWY
252 HEILMAN AVE
1280 SOUTHERN WAY
13858 LA HWY 92
9730 BAY AREA BLVD.
1010 JACKSON'S POINTE CT

CANTON	STARK	OH	44707-
PHOENIX	MARICOPA	AZ	85009-
MIDLAND	MIDLAND	TX	79707-
MIDLAND	MIDLAND	TX	79706-
BROOKLYN HEIGHTS	CUYAHOGA	OH	44131-
RHOME	WISE	TX	76078-
NORTH KINGSTOWN	WASHINGTON	RI	02852-
EAST LYME	NEW LONDON	CT	06333-
HAZLETON	LUZERNE	PA	18202-
GRAPEVINE	TARRANT	TX	76051-
FOWLERVILLE	LIVINGSTON	MI	48836-
GARDENDALE	ECTOR	TX	79758-
REIDSVILLE	ROCKINGHAM	NC	27320-
MOORESVILLE	IREDELL	NC	28115-
NEWBURGH	WARRICK	IN	47630-
MANCHESTER	COFFEE	TN	37355-
CLEBURNE	JOHNSON	TX	76033-
BURTON	GEAUGA	OH	44021-
SALT LAKE CITY	SALT LAKE	UT	84118-
THEODORE	MOBILE	AL	36582-
LIVONIA	WAYNE	MI	48150-
CINCINNATI	HAMILTON	OH	45229-
ROCKWALL	ROCKWALL	TX	75032-
CLEVELAND	CUYAHOGA	OH	44110-
GREEN BAY	BROWN	WI	54313-
ARLINGTON	TARRANT	TX	76011-
LONGVIEW	GREGG	TX	75603-
HAMMOND	LAKE	IN	46320-
CHARLOTTE	MECKLENBURG	NC	28273-
WAXAHACHIE	ELLIS	TX	75167-
THREE RIVERS	LIVE OAK	TX	78071-
RICHWOOD	BOONE	KY	41094-
NORTH SALT LAKE	DAVIS	UT	84054-
STERLING	RICE	KS	67579-
SONORA	SUTTON	TX	76950-
ELLWOOD CITY	BEAVER	PA	16117-
LAKELAND	POLK	FL	33812-
CROTHERSVILLE	JACKSON	IN	47229-
SAINT LOUIS	ST LOUIS	MO	63114-
PLEASANT PRAIRIE	KENOSHA	WI	53158-
SAINT FRANCIS	MILWAUKEE	WI	53235-
MARION	SMYTH	VA	24354-
BELMONT	PLEASANTS	WV	26134-
SPARKS	WASHOE	NV	89431-
MAURICE	VERMILION	LA	70555-
PASADENA	HARRIS	TX	77507-
ZELIENOPLE	BUTLER	PA	16063-

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41.591768	-71.430057
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35.55805	-80.81601
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42.37156	-83.34581
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41.59452	-87.47036
35.125384	-80.925035
32.363739	-96.940481
28.468284	-98.232171
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36.857667	-81.462739
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5692	110000411475	332510 332813 332812		
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SOUTHWIN LTD NORTH CAROLINA
OPTIBLEND INDUSTRIES INC-MIDLAND
REFINERY SPECIALTIES HEMPSTEAD FACILITY
ENVIRO TECH CHEMICAL SERVICES-PLANT 6
HA INTERNATIONAL LLC
MICHELMAN INC
CHEMSTREAM INC
JACAM MANUFACTURING 2013 LLC-JACAM SOUTHWEST SONORA
SMARK CO
OPTIBLEND INDUSTRIES INC-MILES CITY
EVONIK CORP
MITSUBISHI KAGAKU IMAGING CORP
KEL TECH INC
FRAC-CHEM - PLEASANTON
OPTIBLEND INDUSTRIES-CAMBRIDGE
FANCYHEAT CORP
INDUSTRIAL SPECIALTY CHEMICALS INC
AM STABILIZERS CORP
ROCKWATER ENERGY SOLUTIONS INC
IMPACT CHEMICAL TECHNOLOGIES INC
TECHNICK PRODUCTS INC
TORAY PLASTICS (AMERICA) INC
ATCO RUBBER PRODUCTS INC
ATCO RUBBER PRODUCTS INC
RHINO LININGS CORP
SAINT-GOBAIN PERFORMANCE PLASTICS
PLASKOLITE LLC
BLAIR COMPOSITES LLC
Y-TEX CORP
CONTINENTAL STRUCTURAL PLASTICS INC OF OHIO
ELASTOMER ENGINEERING INC
HUTCHINSON SEALING SYSTEMS INC
DURABLE PRODUCTS INC
TARMAC PENNSUCO COMPLEX
THERM-O-ROCK EAST INC
METALOR TECHNOLOGIES USA CORP REFINING DIV
REC SOLAR GRADE SILICON
ENCORE WIRE CORP
MINTEQ/SPECIALTY MINERALS
FABRICATED PRODUCTS INC DBA SEAFAB METALS CO
JOHNSON MANUFACTURING CO
JOHNSON MATTHEY
HANSEN ENGINEERING INC
APEX TOOL GROUP LLC - CORTLAND NY OPERATION
DORMA USA INC
KNAPE & VOGT MANUFACTURING CO
ARROW FASTENER CO

112 MAXFIELD RD
6215 W COUNTY RD 112
38106 FM 3346 RD
724 PHILLIPS COUNTY RD 411
4243 S AVE
9080 SHELL RD
166 COMMERCE DR
133 PR 3304
8636 OTIS ST
1123 HWY 12 E
2401 DOYLE ST
401 VOLVO PKWY
3408 EAST HWY 158
178 PLEASANTON PARK LN
6820 MANILA RD
40 VERONICA AVE
410 W 169TH ST
705 SILHAVY RD
529 SEABROOK RD
10501 E HIGHWAY 80
238 ST NICHOLAS AVE
50 BELVER AVE
7101 ATCO DR
765 S ERWIN ST
1002 MAIN ST
386 METACOM AVE
1175 5-B'S DR
790 W ANDREW JOHNSON HWY
1825 BIG HORN AVE
333 GORE RD
801 STEUBEN ST
1150 S THIRD ST
137 DAYTON SPUR RD
11000 NW 121 WAY
85 WASHINGTON AVE
255 JOHN L DIETSCH BLVD
3322 RD N NE
1410 MILLWOOD RD
77 DAISY HILL RD
1112 N VIP BLVD
114 LOST GROVE RD
2001 NOLTE DR
167 LAIDLEY'S RUN RD
45 CLEVELAND STREET
1003 W BROADWAY
2700 OAK IND US TRIAL DR NE
271 MAYHILL ST

GREENSBORO	GUILFORD	NC	27405-
MIDLAND	MIDLAND	TX	79706-
HEMPSTEAD	WALLER	TX	77445-
HELENA	PHILLIPS	AR	72342-
TOLEDO	LUCAS	OH	43615-
CINCINNATI	HAMILTON	OH	45236-
STOYSTOWN	SOMERSET	PA	15563-
SONORA	SUTTON	TX	76950-
SOUTH GATE	LOS ANGELES	CA	90280-
MILES CITY	CUSTER	MT	59301-
GREENSBORO	GUILFORD	NC	27406-
CHESAPEAKE	CHESAPEAKE (CITY)	VA	23320-
MIDLAND	MIDLAND	TX	79706-
PLEASANTON	ATASCOSA	TX	78064-
CAMBRIDGE	GUERNSEY	OH	43725-
SOMERSET	SOMERSET	NJ	08873-
SOUTH HOLLAND	COOK	IL	60473-
VALPARAISO	PORTER	IN	46383-
ADA	PONTOTOC	OK	74820-
MIDLAND	MIDLAND	TX	79706-
SOUTH PLAINFIELD	MIDDLESEX	NJ	07080-
NORTH KINGSTOWN	WASHINGTON	RI	02852-
FORT WORTH	TARRANT	TX	76118-
CARTERSVILLE	BARTOW	GA	30120-
RICHMOND	RAY	MO	64085-
BRISTOL	BRISTOL	RI	02809-
ZANESVILLE	MUSKINGUM	OH	43701-
GREENEVILLE	GREENE	TN	37745-
CODY	PARK	WY	82414-
CONNEAUT	ASHTABULA	OH	44030-
SIOUX CITY	WOODBURY	IA	51101-
WYTHEVILLE	WYTHE	VA	24382-
CROSSVILLE	CUMBERLAND	TN	38555-
MEDLEY	MIAMI-DADE	FL	33178-
DONORA	WASHINGTON	PA	15033-
NORTH ATTLEBORO	BRISTOL	MA	27630-
MOSES LAKE	GRANT	WA	98837-
MC KINNEY	COLLIN	TX	75069-
NORTH CANAAN	LITCHFIELD	CT	06018-
CASA GRANDE	PINAL	AZ	85122-
PRINCETON	SCOTT	IA	52768-
WEST DEPTFORD	GLOUCESTER	NJ	08066-
WEST ALEXANDER	WASHINGTON	PA	15376-
CORTLAND	CORTLAND	NY	13045-
STEELEVILLE	RANDOLPH	IL	62288-
GRAND RAPIDS	KENT	MI	49505-
SADDLE BROOK	BERGEN	NJ	07663-

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5739	110000451742	423830 325120		
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ROCKWOOD MANUFACTURING CO
LIBERTY SAFE & SECURITY INC
DIXLINE CORP
CORBIN RUSSWIN
SOUTHCO INC HONEOYE FALLS
L E JOHNSON PRODUCTS INC
INNER-TITE CORP
HUNTER DOUGLAS TUPELO CENTER
ROCKY MOUNTAIN HARDWARE INC (SHOSHONE)
HOPPE NA
COMPX NATIONAL (NATIONAL CABINET LOCK)
BLACK & DECKER (US) INC
MEDECO SECURITY LOCKS INC
OUTOTEC NA
BLUM INC
MASTER LOCK CO
KABA ILCO CORP
NORMA PENNSYLVANIA
STANLEY SECURITY SOLUTIONS - BEST ACCESS SYSTEMS;
EBERHARD MFG CO *
SCHLAGE LOCK CO LLC
SARGENT MANUFACTURING CO
HAGER COS
TRUTH HARDWARE CORP-OWATONNA
HHI DENISON
PERKO INC
KASON INDUSTRIES
ER WAGNER MANUFACTURING CO
LEGGETT & PLATT OMEGA MOTION
ROCKY MOUNTAIN HARDWARE INC (HAILEY)
MACLEAN POWER SYSTEMS
YALE SECURITY INC,NORTON DOOR CONTROLS
VON DUPRIN LLC
ERICO INTERNATIONAL CORP
SCHLAGE LOCK CO LLC
LEGGETT & PLATT LEITCHFIELD
TRIMARK CORP
TECH ORD
OIL STATES INDUSTRIES INC
HONDA OF AMERICA MANUFACTURING INC
AUTOLIV ASP INC
HERITAGE HOME GROUP-LENOIR UPHOLSTERY COMPLEX
PARKER HANNIFIN CORP CHOMERICS DIV
GARLOCK SEALING TECHNOLOGIES
FEDERAL-MOGUL MOTORPARTS
WELSCO INC
BRIDGEPOINT SYSTEMS

300 MAIN ST
1199 WEST UTAH AVENUE
26 SW 4TH AVENUE
225 EPISCOPAL RD
250 EAST STREET
2100 STERLING AVE
110 INDUSTRIAL DR
222 LANEY RD
601 NICKUM WAY
205 E BLACKHAWK DR
26 OLD MILL RD
626 HANOVER PIKE
3625 ALLEGHENY DR
11288 ALAMEDA DR
7733 OLD PLANK RD
2600 N 32ND ST
400 JEFFERYS RD
3582 TUNNELTON RD
6161 E 75TH ST
21944 DRAKE RD
121 W RAILROAD AVE
100 SARGENT DR
150 FOLMAR PKWY
700 W BRIDGE ST
2600 N HWY 91
16490 NW 13TH AVE
57 AMLAJACK BLVD
4611 N 32ND ST
241 JAMIE WHITTEN BLVD
1020 AIRPORT WAY
1465 INDUSTRIAL PARK DRIVE
3000 HWY 74 E
2720 TOBEY DR
31700 SOLON RD
1000 SATELLITE BLVD NW BUILDING 103
435 EMBRY DR
500 BAILEY AVE
47600 180TH ST
7701A S COOPER ST
11000 STATE RT 347
1360 N 1000 W
802 COMPLEX ST
8 COMMONWEALTH AVE (NOT A MAILING ADDRESS)
1666 DIVISION ST
7450 N MCCORMICK BLVD
9006 CRYSTAL HILL RD
4282 S 590 W

ROCKWOOD	SOMERSET	PA	15557-
PAYSON	UTAH	UT	84651-
GALVA	HENRY	IL	61434-
BERLIN	HARTFORD	CT	06037-
HONEOYE FALLS	MONROE	NY	14472-
ELKHART	ELKHART	IN	46516-
HOLDEN	WORCESTER	MA	01520-
SHANNON	LEE	MS	38868-
SHOSHONE	LINCOLN	ID	83352-
FORT ATKINSON	JEFFERSON	WI	53538-
GREENVILLE	GREENVILLE	SC	29607-
HAMPSTEAD	CARROLL	MD	21074-
SALEM	ROANOKE	VA	24153-
STRONGSVILLE	CUYAHOGA	OH	44149-
STANLEY	LINCOLN	NC	28164-
MILWAUKEE	MILWAUKEE	WI	53210-
ROCKY MOUNT	NASH	NC	27801-
CLARKSBURG	INDIANA	PA	15725-
INDIANAPOLIS	MARION	IN	46250-
STRONGSVILLE	CUYAHOGA	OH	44149-
PRINCETON	BUREAU	IL	61356-
NEW HAVEN	NEW HAVEN	CT	06511-
MONTGOMERY	MONTGOMERY	AL	36105-
OWATONNA	STEELE	MN	55060-
DENISON	GRAYSON	TX	75020-
MIAMI	MIAMI-DADE	FL	33169-
NEWNAN	COWETA	GA	30265-
MILWAUKEE	MILWAUKEE	WI	53209-
SALTILLO	LEE	MS	38866-
HAILEY	BLAINE	ID	83333-
TRENTON	GIBSON	TN	38382-
MONROE	UNION	NC	28112-
INDIANAPOLIS	MARION	IN	46219-
SOLON	CUYAHOGA	OH	44139-
SUWANEE	GWINNETT	GA	30024-
LEITCHFIELD	GRAYSON	KY	42754-
NEW HAMPTON	CHICKASAW	IA	50659-
CLEAR LAKE	DEUEL	SD	57226-
ARLINGTON	TARRANT	TX	76001-
EAST LIBERTY	LOGAN	OH	43319-
TREMONTON	BOX ELDER	UT	84337-
LENOIR	CALDWELL	NC	28645-
WOBURN	MIDDLESEX	MA	01801-
PALMYRA	WAYNE	NY	14522-
SKOKIE	COOK	IL	60076-
NORTH LITTLE ROCK	PULASKI	AR	72113-
SALT LAKE CITY	SALT LAKE	UT	84123-

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5772	110060259269	928110 339999 332999 334419 332813 325199		

AMBER CHEMICAL INC
SEACOLE-CRC LLC
CHEMICAL DISTRIBUTORS INC
EMD MILLIPORE CORP
AIRGAS USA LLC
CERAMIC COLOR & CHEMICAL MANUFACTURING CO
BEI HAWAII-IWILEI
BRENNTAG GREAT LAKES LLC
US DOD DFSP CHARLESTON
CHEVRON PHILLIPS CHEMICAL CO LP CLEMENS TERMINAL
SAFETY-KLEEN SYSTEMS INC
ASSOCIATED ASPHALT HOPEWELL LLC
KIANTONE PIPELINE CORP
MIDWEST MANUFACTURING TREATING PLANT
BUCKEYE CARIBBEAN TERMINALS LLC (FORMER SCYI)
WATTS REGULATOR REGTROL
SPECTRUM BRANDS PTO FACILITY
UOP LLC
COMMSCOPE SPARKS NEVADA DISTRIBUTION CENTER
MIDWEST MFG HOLIDAY CITY TREATING PLANT
STANLEY HEALTHCARE SOLUTIONS
MIDWEST MFG VALLEY TREATING PLANT
BOEHRINGER INGELHEIM VETMEDICA INC - CENTRAL WAREHOUSE
C-PORT 3
SAFETY-KLEEN SYSTEMS INC BUFFALO OIL RECOVERY FACILITY
EPIC MIDSTREAM LLC
SAFETY-KLEEN SYSTEMS INC
DNLUKENS
AMERICO CHEMICAL PRODUCTS INC
TRIFECTA TRADING
SAFETY-KLEEN SYSTEMS INC
NATIONAL SECURITY CAMPUS

5201 BOYLAN ST
13505 INDUSTRIAL PARK BOULEVARD
80 METCALFE ST
2909 HIGHLAND AVE
6801 FLORIN PERKINS ROAD
13TH ST & 11TH AVE
311 PACIFIC ST
14765 W BOBOLINK AVE
5862 N RHETT AVE
2611 CR 314
410 SHATTUCK WAY
410 WATER ST
550 MEYER RD
4620 MENARD DR
RT 901 KM 2.7 CAMINO NUEVO WARD
100 WATTS RD
15040 CHOATE CIR
207 JACINTOPORT BLVD
775 WALTHAM WAY SUITE 101
14314 COUNTY ROAD 15
4600 VINE ST
4801 NORTH 264TH STREET
5606 CORPORATE DR
635 ADAM TED" GISCLAIR RD"
60 KATHERINE ST
7 FOUNDATION DR
2760 VALLEY VIEW DR
15 FREEDOM WAY
551 KIMBERLY DRIVE
2000 FM 1405 RD
167 MILL ST
14520 BOTTS ROAD

BAKERSFIELD	KERN	CA	93308-
PLYMOUTH	HENNEPIN	MN	55441-
BUFFALO	ERIE	NY	14206-
CINCINNATI	HAMILTON	OH	45212-
SACRAMENTO	SACRAMENTO	CA	95828-
NEW BRIGHTON	BEAVER	PA	15066-
HONOLULU	HONOLULU	HI	96817-
MENOMONEE FALLS	WAUKESHA	WI	53051-
HANAHAN	BERKELEY	SC	29410-
BRAZORIA	BRAZORIA	TX	77422-
NEWINGTON	ROCKINGHAM	NH	03801-
HOPEWELL	HOPEWELL (CITY)	VA	23860-
WEST SENECA	ERIE	NY	14224-
EAU CLAIRE	EAU CLAIRE	WI	54703-
YABUCOA	YABUCOA	PR	00767-
SPINDALE	RUTHERFORD	NC	28160-
CHARLOTTE	MECKLENBURG	NC	28273-
SARALAND	MOBILE	AL	36571-
SPARKS	WASHOE	NV	89434-
HOLIDAY CITY	WILLIAMS	OH	43554-
LINCOLN	LANCASTER	NE	68503-
VALLEY	DOUGLAS	NE	68064-
SAINT JOSEPH	BUCHANAN	MO	64507-
GOLDEN MEADOW	LAFOURCHE	LA	70357-
BUFFALO	ERIE	NY	14210-
SAVANNAH	CHATHAM	GA	31408-
SHREVEPORT	CADDO	LA	71108-
FRANKLIN	NORFOLK	MA	02030-
CAROL STREAM	DUPAGE	IL	60188-
BAYTOWN	CHAMBERS	TX	77523-
CRANSTON	PROVIDENCE	RI	02905-
KANSAS CITY	JACKSON	MO	64147-

35.40125	-119.05207
45.00239	-93.45249
42.8825	-78.836944
39.16647	-84.43547
NA	NA
40.731177	-80.303118
21.31512	-157.87161
43.1255	-88.0947
32.91318	-79.98589
28.985556	-95.556667
43.11425	-70.81832
37.311	-77.27237
42.84701	-78.77614
44.84697	-91.57288
18.046899	-65.85116
35.35039	-81.9129
35.09834	-80.95467
30.80484	-88.06626
39.55015	-119.54241
41.625176	-84.53423
40.82076	-96.656036
41.302849	-96.329168
39.75161	-94.76415
29.134052	-90.198787
42.85939	-78.85895
32.10967	-81.128
32.43391	-93.77864
42.05314	-71.39639
41.91759	-88.11296
29.68321	-94.9136
41.765944	-71.413515
38.863392	-94.546406

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 10/27/2017 8:01:27 PM
To: Lavoie, Tegan [lavoie.tegan@epa.gov]
Subject: RE: EtO - 21 priority facilities

They're on the one with Peter, so that's good.

Oddly enough, there are a lot of people not on the mtg with Mike that should be and were on the initial list I created. I've sent the missing names forward and added Jennifer's name (Brenda's was already there), but that meeting is out of my hands. (I would say that you all should just come in with Penny, but that's up to you.)

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Lavoie, Tegan
Sent: Thursday, October 26, 2017 2:36 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: EtO - 21 priority facilities

Hi Darcie,

Can we add Brenda and Jennifer to all future EtO meetings, including the briefing?

Thanks!
Tegan

From: Smith, Darcie
Sent: Thursday, October 26, 2017 12:47 PM
To: Lavoie, Tegan <lavoie.tegan@epa.gov>
Subject: RE: EtO - 21 priority facilities

Hi Tegan –

For some reason I couldn't ever connect to the file, so it took me a while. Sorry for the delay!

Yes, it looks like you've got all the facilities that are priority for ethylene oxide, at the tract level. There could be some that pop up at the block level (e.g., Houston Plan in Fort Bend Texas), but the first priority is the ones you've listed in your table below.

Thanks! (and please let me know if there's anything else I can do to help)
Darcie

Darcie Smith

U.S. EPA/OAQPS/ATAG
(919) 541-2076

From: Lavoie, Tegan
Sent: Wednesday, October 25, 2017 8:17 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: EtO - 21 priority facilities

Hi Darcie,

I hope you're doing well. Just to make sure we're all on the same page, can you confirm that the 21 high priority facilities you've identified are the same as the ones that I have? See below:

EIS_ID	Sitename	FACILITY Risk (MIR)	LOCATION_ADDRESS	LOCATION_CITY	state
588911	CRODA INC.	150	315 CHERRY LANE	NEW CASTLE	Delaware
3213711	Pelron Corp (aka Ele Corporation)	590	7847 W 47th St	Lyons	Illinois
3736811	SHELL TECHNOLOGY CENTER HOUSTON	420	3333 HWY 6 SOUTH	HOUSTON	Texas
3965211	SOLVAY USA INC	250	2151 KING ST EXT	CHARLESTON	South Carolina
4057911	CLEAR LAKE PLANT	300	9502 BAYPORT BLVD	PASADENA	Texas
4926611	BAYPORT UNDERWOOD PLANT	450	5761 UNDERWOOD RD	PASADENA	Texas
4941411	CHANNELVIEW PLANT	410	2502 SHELDON RD	CHANNELVIEW	Texas
4941511	TEXAS OPERATIONS	1300	HWY 149 KODAK BLVD	LONGVIEW	Texas
4945211	PORT NECHES PLANT	1400	2102 SPUR 136	PORT NECHES	Texas
5287111	Air Products Performance Manufacturing Inc - Reserve Plant	710	474 W 19th St	Reserve	Louisiana
5504811	Taminco US Inc	1100	3790 Hwy 30	St. Gabriel	Louisiana
5782311	UNION CARBIDE CORP -SO CHARLESTON FAC.	1100	437 MACCORKLE AVENUE	SOUTH CHARLESTON	West Virginia
6884411	UNION CARBIDE CORPORATION-INSTITUTE	840	ROUTE 25	INSTITUTE	West Virginia
7202911	Union Carbide Corp - St Charles Operations	1800	355 Hwy 3142 Gate 1	Taft	Louisiana
7351811	Monument Chemical Kentucky LLC	2300	2450 Olin Rd	Brandenburg	Kentucky
7445611	Shell Chemical LP - Geismar Plant	470	7594 Hwy 75	Geismar	Louisiana
7451011	BCP Ingredients Inc	2300	3830 Hwy 30	St. Gabriel	Louisiana
7990911	BASF Corporation	7700	2 PLEASANT VW AVE	WASHINGTON	New Jersey
8465611	BASF Corp - Geismar Site	320	8404 River Rd (Hwy 75)	Geismar	Louisiana

8467311	The Dow Chemical Co - Louisiana Operations	190	21255 Hwy 1	Plaquemine	Louisiana
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	680	2201 Old Spanish Trail	Westlake	Louisiana

I filtered on RCG applicable facilities with EtO emissions, and then filtered on the highlighted rows (i.e., rows where both the block and tract level risks are high). Thanks in advance.

Best,
Tegan

Tegan N. Lavoie, PhD | Physical Scientist
OAR/OAQPS/SPPD/Refining and Chemicals Group
U.S. Environmental Protection Agency
109 TW Alexander Drive, Office: E142G, MC:E143-01
Research Triangle Park, NC 27711
Phone: (919) 541-5110 | Email: lavoie.tegan@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 11/1/2017 9:33:16 PM
To: Cozzie, David [Cozzie.David@epa.gov]
CC: Witt, Jon [Witt.Jon@epa.gov]
Subject: FW: Materials for Tomorrow's EtO mtg w Mike
Attachments: Mike K EtO Nov 2 2017 high level Final.docx; EtO Attachment Detailed Status for Mike K 11 02 17 Final.docx; EtO Pager for Mike K and DDs 08 01 17 Final.docx

fyi

From: Rimer, Kelly
Sent: Wednesday, November 01, 2017 4:25 PM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Lassiter, Penny <Lassiter.Penny@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Houyoux, Marc <Houyoux.Marc@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; French, Chuck <French.Chuck@epa.gov>; Wayland, Richard <Wayland.Richard@epa.gov>; Shine, Brenda <Shine.Brenda@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>; Weinstock, Lewis <Weinstock.Lewis@epa.gov>
Subject: FW: Materials for Tomorrow's EtO mtg w Mike

FYI

From: Rimer, Kelly
Sent: Wednesday, November 01, 2017 3:45 PM
To: South, Peter <South.Peter@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Materials for Tomorrow's EtO mtg w Mike

Hi Pete,

Here are the documents for tomorrow's EtO mtg with Mike.

There are three items:

- A high level pager that we will walk through during the meeting
- A detailed status dated Nov 2017 – it would be great if he could read this before the mtg tomorrow
- The previous pager we sent him this past August – just so he has it handy

Thanks,
Kelly

Kelly Rimer
Leader, Air Toxics Assessment Group
US EPA
Office of Air Quality Planning and Standards
109 TW Alexander Drive

RTP. NC 27709
919-541-5368

Ethylene Oxide Update for Mike Koerber
November 2, 2017

Purpose:

- To provide an update on the work that has been done to investigate the potential for EtO exposures to cause health risks.
- To discuss next steps.

Issues:

- EtO emissions from approximately 60-70 facilities may present a public health concern.
    - In December 2016, ORD released the IRIS assessment for the carcinogen ethylene Oxide (EtO). EtO is now known to be approximately 60 times more potent than previously understood. It is a known human carcinogen.

- Some of the facilities are included in source categories for which RTR reviews are ongoing, (e.g., Miscellaneous Organic Chemical Production and Processes (MON).
    - The initial review for the MON source category, shows the potential for some of the EtO risk to be attributable to MON processes.
- The facilities also include source categories for which the RTRs have already been completed (e.g., HON, polyether polyols, commercial sterilizers).
    - Some are due for technology reviews.
- Other source categories such as Ethylene Production and Organic Liquids Distribution (OLD) could show risks well above 100-in-1 million from EtO being emitted from other on-site source categories (e.g., HON and/or Polyether Polyols Production)
    - These risks could show up as part of the facility-wide risk assessment.

- The Regions continue to be active in their efforts to brief their management, conduct outreach to states, and assess the potential public health impacts.

Status:

Please see detailed pager dated November 2017. We have also attached the previous pager, dated August 2017.

Current and Next Steps:

- Working to QA/QC the emissions data for the facilities that NATA identified. Likely path forward is to work through the ACC to confirm / change emissions.
- Gathering data on un- or under-controlled emissions sources for the above source categories, and possible options for emissions reductions.
- Researching options for alternative source and ambient monitoring.
- Investigating the potential for working on an approach to address potential risks from EtO with inter- or intra-Agency groups for whom EtO may also be a potential issue.
    - Other EPA offices, CDC, OSHA
- Brief Steve Page – Nov 2017
- Brief OAR Mgmt – Dec 2017

Timeline:

- Summer 2018 – release of 2014 NATA, includes nationwide census tract level risk results
    - EtO expected to drive cancer risks

- Aug 2018 – Ethylene Production Source Category RTR Proposal
- Oct 2018 – Organic Liquids Distribution Source Category RTR Proposal
- Dec 2018 – Miscellaneous Organic Chemical Production and Processes (MON) Source Category RTR Proposal

Attachment

Ethylene Oxide (EtO)
Detailed Status to Accompany Update for Mike Koerber

November 2017

EtO Facility Review:

- 42 "priority list" facilities in version 1 (v1) of the 2014 NATA, where cancer risks at the census tract level are greater than 100-in-1 million and are driven by emissions of EtO from stationary sources. We have begun QA of these sources.
- 34 additional facilities that are likely to have risks well above 100-in-1 million at the census block level even if they don't show up at the tract-level in NATA. These are not publically released in NATA. We will soon begin to QA these sources.

- For the 42 "priority list" facilities where cancer risks are driven by EtO, all have been reviewed or verified by state agency data submitters or by the TRI program.
    - 33 of these 42 we predict will continue to be a priority in version 2 (v2) because no changes were received during the NATA review.
        - 3 of these 33 used EtO in 2014, however discontinued its use post-2014.
        - The NATA review is complete and all comments received have been incorporated into version 2 of the 2014 NEI.
        - Point source modeling for NATA will begin in November; tract-level risks won't be known until mid-2018.
    - 9 of the 42 submitted changes to emissions or stack parameters and are predicted to not contribute to elevated risk at the census track level (although they still could be well above 100-in-1 million at the block level).

EPA-R6-2021-005139 6.7.2022 Prod ED_005994A_00000069-00001

Summary Table of Source Categories and Number of Facilities Emitting EtO

Number of Facilities and Characterization				Note
Status in v1 2014 NATA	Predicted Status in v2 2014 NATA	Type of facility	Source category	
42 NATA >100-in-1 million @ tract in v1	**33** (or 30)[a] Likely to have *tract* risk above 100-in-1 million in v2	**21** Chemical facilities	**12** Ethylene, MON, OLD (may also be subject to other rules such as HON or Polyether Polyols Production)	Ethylene – 6 facilities – no EtO risk attributable to source category MON – 11 facilities – some of EtO risk may be attributable to source category OLD – 4 facilities – no EtO risk attributable to source category
			2 HON and/or Polyether Polyols Production	
			6 Minor sources	
			1 Closing	
		12 Sterilization facilities		
	9 Likely not to have tract risk above 100-in-1 million in v2, although still could at the *block*			Not yet examined
34 NATA>100-in-1 million @ block in v1				Not yet examined

[a] Could be 30 facilities if we allow for those that discontinued use of EtO after 2014.

- Updates to Sterilizer Facilities (12 of 33):
    - Release parameter discrepancies found with all facilities in Georgia.
    - Minor discrepancies found for a facility in New Mexico.
    - Minimal emissions changes found for a facility in Louisiana, however after 2014.
    - The removal of EtO sterilizers from two hospitals in Chicago was confirmed with a state contact.
- Updates to Chemical Manufacturing Facilities (21 of 33):
    - We are focusing on whether any of the 42 priority facilities have EtO emissions associated with categories for which we have upcoming RTR deadlines.
    - We have identified 21 of the 42 high priority EtO facilities that are chemical facilities that either manufacture EtO, react it to make ethylene glycol, polyether polyols or surfactants, or store and distribute it.
        - Of these 21, we have obtained documentation for 20 facilities and confirmed the other facility ceased use of ethylene oxide and is closing this year.
        - We are using Title V permits, other available information, in-house expertise on these chemical processes, and discussions we have underway with American Chemistry Council in the context of the RTR work to determine whether any of these EtO emissions are attributable to Ethylene Production, MON and/or OLD source categories.
        - We have identified 12 facilities that have operations on-site that are subject to the Ethylene Production and/or MON and/or OLD source categories. At this point, we confirmed that no EtO emissions are associated with the Ethylene Production source category and determined that no EtO emissions are from the OLD source category; however, EtO is likely to contribute to facility-wide risks. The initial review for the MON source category, shows the potential for some of the EtO risk to be attributable to MON processes.
    - We also know that many of these EtO emissions are from processes subject to the Hazardous Organic NESHAP (HON) or Polyether Polyols Production, for which we completed the RTR reviews in 2006 and 2014, respectively.

Regions:

- Regions continue to brief their management about potential risks from ethylene oxide emissions.
- Additional activities include talking to states (e.g., R2, R6) and conducting modeling (e.g., R2, R5).
- Expected presentations on ethylene oxide at R5 annual meeting with state risk assessors (Nov 1-2) and at R1/R2 NESCAUM meeting (Nov 14-15).
- R6 drafting talking points so Regions can be consistent when talking to their states, which is important if a company has facilities in more than one region. When ready, OAQPS will review.

Ambient Monitoring:

- Current method for ambient sampling and analysis is TO-15 using canisters. However, the current detection limit is equivalent to a cancer risk level of approximately 1,000-in-1 million (see table below). We are researching alternatives.
    - The national contract lab, ERG, is looking at how low detection limits can go. To do this, they need a new gaseous standard, which has been ordered.
    - A lab in Rhode Island has collected and analyzed samples for EtO with MDLs in the 100-1,000-in-1 million risk range. They measured (above MDL) down to 0.07 $\mu g/m^3$ (and had self-reported MDL of 0.018 $\mu g/m^3$) which is ~~between~~ approximately 100~~–and 1,000~~-in-1 million. We are verifying this with ERG.

Source Monitoring:

- Stationary source measurement methods evaluated by EPA in 1988 for EtO sterilizer emissions limits include direct analysis by gas chromatography with flame ionization detection. In the same study, EPA evaluated extractive canister sampling and analysis of EtO sterilizers.
- NIOSH published 2 methods (NIOSH 1614 and NIOSH 3702) to measure EtO in workplace air.
- A summary table of methods used to measure EtO is provided below.
- Ambient methods require additional evaluation to confirm that they are applicable for the ambient concentrations relevant to risk levels we're seeing from the modeling.

Ethylene Oxide Air Concentrations and Risk Levels

Cancer risk level	($\mu g/m^3$)	MW	PPB	PPT
1-in-1 million	0.0002	44.05	0.00011	0.11
10-in-1 million	0.002	44.05	0.00111	1.11
100-in-1 million	0.02	44.05	0.01110	11.10
1,000-in-1 million	0.2	44.05	0.11101	111.01

Ethylene Oxide Measurement Methods and Sensitivities (MDL)

Method Type	Test Method #	Method Detection Limit (MDL)	Type	Comments
Canister	TO-15	1) 0.01 ppb (based on Rhode Island entity-entered MDL) 2) ERG – still waiting. Expect same as above	Ambient	1) Was used by Rhode Island (reported in Air Toxics Archive)
Canister	Direct Inject GC/FID and GC/MS	Stability Study only	Source (i.e., stack)	No preconcentration. 72 Hour Stability without pretreatment showed 2.5 ppm negative bias
GC/FID online (semi continuous)	Radian Report 1988	MDL 30 ppb	Source	MDL per Knoll, J. of Chromatographic Science, 23, (1985) 422-425 direct GC/FID no preconcentration.
GC/PID online (semi continuous)	CARB 431	MDL ~ 67 ppb	Source	Tedlar Bag Collection PQL~ lowest calibration point Practical Quantitation Limit (PQL) = 200 ppb
Sorbent Tube (carbon coated with HBr)	NIOSH 1614	MDL 0.013 ppb	Workplace exposure	PQL = 50 ppb The range NIOSH worked in is 0.05 to 4.6 ppm (0.08 to 8.3 mg/m3) for a 24-L air sample. The method is applicable to short-term (10-min) samples.
Bag or Ambient Air	NIOSH 3702	Expect same as GC/FID or GC/PID	Workplace exposure	PQL = 1 ppb The working range is 0.001 to 1000 ppm in relatively non-complex atmospheres (e.g., sterilization facilities).

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 11/1/2017 7:43:51 PM
To: Kelly Rimer [Rimer.Kelly@epa.gov]
Subject: Emailing: EtO Pager for Mike K and DDs 08 01 17.docx
Attachments: EtO Pager for Mike K and DDs 08 01 17.docx

Your message is ready to be sent with the following file or link attachments:

EtO Pager for Mike K and DDs 08 01 17.docx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 6/5/2017 12:59:56 PM
To: Sieffert, Margaret [Sieffert.Margaret@epa.gov]
CC: Palma, Ted [Palma.Ted@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

Hi Margaret
Thanks for the changes – no I don't need them in a change sheet. However I have some follow up questions/issues.

1) Regarding Pelron, there are 4 separate release points – are they all at this lat/lon? Note I show in the figure the census block receptor locations with respect to the source. (you need to look at both slides to see the top 3 receptors). Before I make the change, I wanted to make sure this change reflects the storage tanks release point which is the one for the one emitting ethylene oxide (first one in the below table). Could these storage tanks be farther south than what you provided or is the yellow oval I put on the figure the most accurate location)?

	EIS Release Point ID	Agency Release Point ID	Program System Code	Release Point Description	Status	Release Point Type	Stack Height (FT)	Stack Diameter (FT)
	37261412	0002	ILEPA	6 Storage tanks	Operating	Vertical	8	0.33
	37261312	0006	ILEPA	6200 Gallon blend tank	Operating	Vertical	15	0.3
	37261212	0001	ILEPA	7 Reactors	Operating	Vertical	6	0.2
	37261112	0005	ILEPA	CL Brooks boiler	Operating	Vertical	24	1.3

2) For custom Hard Chrome—You indicated that this facilty closed in 2015/6. this is the 2014 NATA so we would need changes to 2014 emissions. Do you have any changes to 2014? In the past we included information on post-2014 emissions in our "Errata-updates" list but we don't change the 2014 emissions unless they are incorrect. I see that this facility (and 3 others) have a large impact on tract 17031819100 (per the below table). Do you have any changes for the hospitals which also contribute to that tract? Many hospitals no longer use ethylene oxide (I have determined this based on the comments I've gotten back from other states) and if they do, in lower quantities than were reported to the NEI for 2014.

State	EPA Region	County	FIPS	Tract	Population	TRACT PT-StationaryPoint Cancer Risk (per million)	Driver Facility	State Reviewed Data? (Y/N) 5/15/17 version	Change Submitted ? (Y/N)	NOTES	State or Tribe	FI

IL	EPA Region 5	DuPage	17043	17043845902	3411	265.327	3219211	Y	N		Illinois	173
IL	EPA Region 5	Lake	17097	17097862605	4367	123.598	8140511	Y	N		Illinois	177
IL	EPA Region 5	Madison	17119	17119400102	5603	80.901	4618211	Y	Y	zeroed out hex - ILEPA does not believe Hex is emitted	Illinois	179
IL	EPA Region 5	Cook	17031	17031819100	4552	75.650	3213711	Y	N		Illinois	171
IL	EPA Region 5	Cook	17031	17031819100	4552	76	2631311	Y	N		Illinois	171
IL	EPA Region 5	Cook	17031	17031819100	4552	76	1849811	Y	N		Illinois	171
IL	EPA Region 5	Cook	17031	17031819100	4552	76	3340511	Y	N		Illinois	171

Madeleine Strum|U.S. Environmental Protection Agency|109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Sieffert, Margaret
Sent: Monday, June 05, 2017 7:50 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

I have one facility that closed and one slight modification to the lat long.

Custom Hard Chrome – Rosemont IL. Closed in 2015/6 and sold building to Rosemont.
http://www.dailyherald.com/article/20161218/news/161218941/

Pelron Corp – Lyons, IL the lat long was slightly off. Lat: 41.805678, Long: -87.817320

Let me know if you need it in an official change sheet.

-Margaret

From: Strum, Madeleine
Sent: Thursday, June 01, 2017 3:45 PM
To: Sieffert, Margaret <Sieffert.Margaret@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

Hi Margaret

Thanks. Are these emissions changes? If so, the Process Change sheets would work for me. What are the facilities and I could email you a change sheet with just those facilities on them.

Thanks

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Sieffert, Margaret
Sent: Thursday, June 01, 2017 4:25 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

Hi Madeleine, I have two R5 updates. I wasn't sure how you wanted us to send you comments back. Let me know and I will send them to you.

From: Strum, Madeleine
Sent: Tuesday, May 23, 2017 6:20 AM
To: Lancey, Susan <lancey.susan@epa.gov>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; King, Suzanne <king.suzanne@epa.gov>; Nwia, Jacqueline <nwia.jacqueline@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Forde, Raymond <Forde.Raymond@epa.gov>; Smuts, MaryBeth <Smuts.Marybeth@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>

Cc: Palma, Ted <Palma.Ted@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Phillips, Sharon <Phillips.Sharon@epa.gov>; Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; jeff.myers@wisconsin.gov; Mason, Rich <Mason.Rich@epa.gov>; Houyoux, Marc <Houyoux.Marc@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Cook, Rich <Cook.Rich@epa.gov>; Senthil, Velu <Senthil.Velu@epa.gov>
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We've put together a list of facilities that we need you to review or coordinate with states to review to make sure the emissions are correct. These are facilities that contribute to tract risks for tracts > 100 in a million risk based on the modeling of the 2014 NEI v1 emissions.

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Our target is to have the entire list reviewed by the **end of June**. **These data are for sharing only with state/local/tribal (S/L/T) agency and S/L/T should not share them outside their agency.**

Thanks

Madeleine

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Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Palma, Ted [Palma.Ted@epa.gov]
Sent: 6/9/2017 1:03:12 PM
To: Strum, Madeleine [Strum.Madeleine@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

It's a 2014 snap shot so we must include the emissions if they occurred in 2014. We can add to an errata sheet as an afterthought.

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Strum, Madeleine
Sent: Wednesday, June 07, 2017 4:08 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Subject: FW: List of point sources impacting 2014 NATA v1 tract risks

Hello
Hope your meeting went well. Per the email below, I have a Meeting topic=== if we know that AFTER 2014 emissions were eliminated from a facility causing a tract to be > 100 in 2014 how to handle in NATA?

In 2011 we put it in the errata and updates sheet but these aren't facilities that caused tract risks > 100.

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Cc: Palma, Ted <Palma.Ted@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; King, Suzanne <king.suzanne@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

Margaret,
Thanks so much for all your follow up and your helpful emails! For the 2014 NATA I think I need 2014 emissions. I could assume Saint Anthony didn't use these in 2014 and zero them out but 3-4 years ago doesn't fully support that. For

both of these facilities, it is great to know they are not there now and we should definitely make note of this (at a minimum) – so I'm not sure it is worth checking back with the facilities on their 2014.

I'll get back to you – we didn't really have this situation (tract risk > 100 in 2014 but source no longer there) and I'd like to talk to the team how they want to handle this. In the mean time I will annotate the excel sheet on the SharePoint.

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Let me know if you have any additional questions and I can call them back.

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Hi Madeleine,

Suzanne and I have looked into your questions a bit more yesterday and today.

Pelron is also know by the parent company name: Elé Corporation. I was able to verify the emissions with the consultant Pelron uses to submit their emissions to TRI - United States Compliance Corporation.

The lat long was confirmed to be incorrect and they will correct that in the TRI system to reflect the change. According to the consultant, all the process units are located towards the middle and back of the property. The consultant didn't have specifics but was ok if you centralize the lat long to the middle of the property. The emissions are correct as reported and the consultant said the facility uses a lot of EtO. In calculating the emissions, they use the emission factor of 1.5 from AP42 chapter 6.4 table 6.4.1. There is a scrubber on the system which they claim 99% control. They didn't have release parameters readily available to share so I am unable to update those for you. If you have additional questions, let me know and I will call the consultant back again.

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> Yes, all the ETO sources were reviewed. Probably just missed stating that for those two in the spreadsheet. No changes were made since that is what they reported on their annual emission report.

Today I called both hospitals and their operators directed me to their sterilization departments. I left messages for both managers and will let you know what they say once I hear back from them.

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To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
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IL	EPA Region 5	Lake	17097	17097862605	4367	123.598	8140511	Y	N		Illinois	177
IL	EPA Region 5	Madison	17119	17119400102	5603	80.901	4618211	Y	Y	zeroed out hex - ILEPA does not believe Hex is emitted	Illinois	179
IL	EPA Region 5	Cook	17031	17031819100	4552	75.650	3213711	Y	N		Illinois	171
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Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

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Custom Hard Chrome – Rosemont IL. Closed in 2015/6 and sold building to Rosemont.
http://www.dailyherald.com/article/20161218/news/161218941/

Pelron Corp – Lyons, IL the lat long was slightly off. Lat: 41.805678, Long: -87.817320

Let me know if you need it in an official change sheet.

-Margaret

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Sent: Thursday, June 01, 2017 3:45 PM
To: Sieffert, Margaret <Sieffert.Margaret@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

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CC: Palma, Ted [Palma.Ted@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; King, Suzanne [king.suzanne@epa.gov]
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Hi Margaret
If you go to SharePoint – Priority Facility List-- you will see that Region5 sources have been reviewed. If there are any comments I missed can you either let me know or add them in SharePoint? I think having the comments is very helpful so if you have done any additional outreach on the ones where the emissions will not change, please include that information in the comments.

Thanks!

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-Margaret

From: Strum, Madeleine
Sent: Thursday, June 01, 2017 3:45 PM

To: Sieffert, Margaret <Sieffert.Margaret@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

Hi Margaret

Thanks. Are these emissions changes? If so, the Process Change sheets would work for me. What are the facilities and I could email you a change sheet with just those facilities on them.

Thanks

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Sieffert, Margaret
Sent: Thursday, June 01, 2017 4:25 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: List of point sources impacting 2014 NATA v1 tract risks

Hi Madeleine, I have two R5 updates. I wasn't sure how you wanted us to send you comments back. Let me know and I will send them to you.

From: Strum, Madeleine
Sent: Tuesday, May 23, 2017 6:20 AM
To: Lancey, Susan <lancey.susan@epa.gov>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; King, Suzanne <king.suzanne@epa.gov>; Nwia, Jacqueline <nwia.jacqueline@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Forde, Raymond <Forde.Raymond@epa.gov>; Smuts, MaryBeth <Smuts.Marybeth@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Phillips, Sharon <Phillips.Sharon@epa.gov>; Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; jeff.myers@wisconsin.gov; Mason, Rich <Mason.Rich@epa.gov>; Houyoux, Marc <Houyoux.Marc@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Cook, Rich <Cook.Rich@epa.gov>; Senthil, Velu <Senthil.Velu@epa.gov>
Subject: List of point sources impacting 2014 NATA v1 tract risks

Hello EPA NATA Regional Leads:

We've put together a list of facilities that we need you to review or coordinate with states to review to make sure the emissions are correct. These are facilities that contribute to tract risks for tracts > 100 in a million risk based on the modeling of the 2014 NEI v1 emissions.

The file (excel) is on SharePoint: https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/DocumenationInstructions/Priorty%20Facility%20List%20-based%20on%20tract%20risk.xlsx?d=waf2688ed4912470eba2be30fe30f7f65 You can download by saving it to your hard-drive and it will be easier to filter that way.

Please review the facilities that do not have a "Y" in column I ("State Reviewed Data") or do not have a NOTE that indicates that they were put on the TRI list – the ones with the TRI note are being looked at by Velu Senthil of the TRI Program (and he will coordinate with TRI Regional Office leads). In addition to emissions, please also look at the geographic coordinates and release parameters which are in the VIEW3 files on SharePoint (or you can use the NATA Map App).

Our target is to have the entire list reviewed by the **end of June**. **These data are for sharing only with state/local/tribal (S/L/T) agency and S/L/T should not share them outside their agency.**

Thanks

Madeleine

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 7/5/2017 4:47:33 PM
To: Kelly.Petersen@LA.gov
CC: Verhalen, Frances [verhalen.frances@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Maureen Ducote [Maureen.Ducote@la.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]
Subject: RE: ethylene oxide emissions - NATA review

Hi Kelly
There are 2 more facilities (listed below) that I don't have a record of your reviewing. Can you let me know if these emissions (columns highlighted in yellow) are correct? These facilities cause the tract risk to exceed 100 in a million:

Note that details on the process/release point (modeling file) ethylene oxide emissions are attached.

Thanks!!!

State	EPA Region	County	FIPS	Tract	Population	TRACT PT-StationaryPoint Cancer Risk (per million)	Driver Facility	State Reviewed Data? (Y/N) 5/15/17 version	Change Submitted ? (Y/N)	NOTES	State or Tribe	F
LA	EPA Region 6	Ascension	22005	22005030300	13728	97.828	7445611				Louisiana	225
LA	EPA Region 6	Iberville	22047	22047953102	2449	95	8467311				Louisiana	227

Madeleine Strum|U.S. Environmental Protection Agency|109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Kelly Petersen [mailto:Kelly.Petersen@LA.GOV]
Sent: Tuesday, March 21, 2017 5:16 PM
To: Strum, Madeleine

Cc: Verhalen, Frances ; Palma, Ted ; Smith, Darcie ; Maureen Ducote
Subject: RE: ethylene oxide emissions - NATA review

Madeleine,
I reviewed these emissions and they are all below the permitted limit, so I have no reason to doubt their validity. See the updates to the chart below.

Thanks,
Kelly Petersen
Air Planning and Assessment Division
Louisiana Department of Environmental Quality
Phone: (225) 219-3397 Fax: (225) 325-8141 kelly.petersen@la.gov

---

From: Strum, Madeleine [mailto:Strum.Madeleine@epa.gov]
Sent: Tuesday, March 21, 2017 7:45 AM
To: Kelly Petersen
Cc: Verhalen, Frances; Palma, Ted; Smith, Darcie
Subject: ethylene oxide emissions - NATA review

Hi Kelly,

A number of Louisiana facilities have ethylene oxide (EtO) emission estimates that could result in highly elevated tract risks. As we indicated in our January 2014 NATA modeling update (email from Sally Dombrowski 1/27/2017), the cancer health benchmark for Ethylene Oxide (EtO) was updated by EPA in December 2016 (https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025) and cancer risk levels for this pollutant are approximately 50 times higher.

In terms of annual emissions, the largest is Union Carbide, at about 15 tons EO emissions.

State or Tribe	FIPS	County	EIS facility_id	agy_facility_id	facility_name	Permitted Emissions	Reported to ERIC 2014
Louisiana	22089	St. Charles	7202911	2083	Union Carbide Corp - St Charles Operations	48.839	15.0347600000
Louisiana	22047	Iberville	7451011	27495	BCP Ingredients Inc	5.08	2.5017094370
Louisiana	22047	Iberville	5504811	3263	Taminco US Inc	1.74	1.1494700000
Louisiana	22095	St. John the Baptist	5287111	13560	Air Products Performance Manufacturing Inc - Reserve Plant	1.89	1.6109500000
Louisiana	22005	Ascension	8465611	2049	BASF Corp - Geismar Site	17.13	7.1451525350
Louisiana	22019	Calcasieu	8468011	3271	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	20.69	6.3227405000

These (along with a few others)are all on the "Jan2017 Update" of the SharePoint check list
https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/Data/CheckList/checklist.xlsx?d=w276998ab32364c90a67e05342b2904ac

Have you verified the emissions and release parameters for these facilities?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 8/24/2017 5:05:26 PM
To: Lavoie, Tegan [lavoie.tegan@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
CC: Shine, Brenda [Shine.Brenda@epa.gov]
Subject: RE: RCG Facilities
Attachments: Copy of Copy of facility100_with_priority_andNEIv2draftemis_USETHISONE.xlsx

Here you go. Some are probably TRI facilities.

From: Lavoie, Tegan
Sent: Thursday, August 24, 2017 12:14 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Shine, Brenda <Shine.Brenda@epa.gov>
Subject: RCG Facilities

Hi Darcie and Madeleine,

Attached, please find the facility100 list with RCG applicability added to Column E. There are 49 facilities total. See tab "RCG only" for the list of unique EIS IDs and the states where these sites are located. It looks like we have 10 facilities in TX, 9 in LA, 4 in WV, and 3 or less in 17 other states. If we could get Madeleine's contact information for the states shown in the "RCG only" tab, that would be great.

Thanks,
Tegan

Tegan N. Lavoie, PhD | Physical Scientist
OAR/OAQPS/SPPD/Refining and Chemicals Group
U.S. Environmental Protection Agency
109 TW Alexander Drive, Office: E142G, MC:E143-01
Research Triangle Park, NC 27711
Phone: (919) 541-5110 | Email: lavoie.tegan@epa.gov

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 8/16/2017 11:19:48 AM
To: Lavoie, Tegan [lavoie.tegan@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Witt, Jon [Witt.Jon@epa.gov]
CC: Salem, Nevine [Salem.Nevine@epa.gov]
Subject: FW: facility-pollutant emissions for NATA review
Attachments: EtO faclities details.docx

Hi All

Here's some information Nevine from Region 6 shared with me at the conference– it conflicts with Louisiana's statement that the facilities are all within their permit limits. One follow up for Region 6 is to make sure it is the latest-greatest permit which reminded me that for the emissions changes you have, they need to be 2014 emissions, not an earlier or later year.

Thanks

Madeleine Strum|U.S. Environmental Protection Agency|109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards|Air Quality Assessment Division|Emission Inventory and Analysis Group|919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Salem, Nevine
Sent: Monday, August 14, 2017 5:23 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: facility-pollutant emissions for NATA review

Nevine Salem
Environmental Engineer
Ozone & Infrastructure Section (6MM-AB)
U.S. EPA, Region 6
1445 Ross Avenue
Dallas, Texas 75202
(214)-665-7222

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From: Strum, Madeleine
Sent: Monday, August 14, 2017 5:16 PM
To: Salem, Nevine <Salem.Nevine@epa.gov>
Subject: facility-pollutant emissions for NATA review

Please call if you have questions.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

BCP Ingredients Inc. – (BIO ADDITIVES LLC) - Balchem Corp., St. Gabriel, Iberville Parish, Louisiana

Responsible Agency: LDEQ Activity No.: PER20 150004 Agency Interest (AI#) No.: 27495

Minor Source Permit No.: I280-00058-04 issued Feb 14, 2011, request for modification received Dec.16, 2015

Estimated emissions and emissions rates from this facility in tons per year are as follows:

LAC 33:III. Chapter 51 Toxic Air Pollutants TAPs

Pollutant	Before Phase I	After Phase II	Change
Ammonia	-	0.03	+0.03
Chlorine	-	0.01	+0.01
Ethylene Oxide	4.21	5.08	+0.87
Hydrochloric acid	2.39	2.96	+0.57
Total VOC TAPs	**4.21**	**5.08**	**+0.87**
Total Non VOC TAPs	2.39	3.00	+0.61
Other VOCs	4.84	5.91	+1.07
Total VOCs	**9.05**	**10.99**	**+1.94**

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 27495 - BCP Ingredients Inc
Activity Number: PER20150006
Permit Number: 1280-00058-04
Air - Minor Source/Small Source Admin Amendmt

All phases

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0006 8-95	Ethylene oxide	<0.001	<0.001	<0.01
EQT 0013 1-14	Ethylene oxide	0.001	0.045	0.01
FUG 0001 5-95	Ethylene oxide	1.62	1.94	5.06
	Hydrochloric acid	0.72	0.87	2.85
UNF 0001	Ammonia			0.03
	Chlorine			0.01
	Ethylene oxide			5.08
	Hydrochloric acid			2.96

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		300.02	160.00	8,794.00	8,888.00	8,947.00	7,418.00	8,100.00	8,367.00	5,003.00	4,043.00
NEI	Ethylene oxide	Pounds				8,793.00			7,418.00			5,003.42	

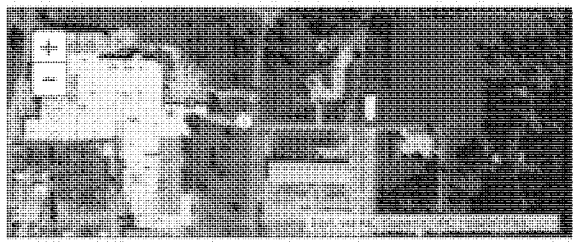
*the difference between the TRI data and NEI data is very marginal. [HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110000597417"]

*2014 actual reported NEI ETO emission is approx. half the permit limit.

Baxter Health Care – Mountain Home, AR

[HYPERLINK "https://echo.epa.gov/detailed-facility-report?fid=110000743599"]

Facility Summary



BAXTER HEALTHCARE-MT HOME
1900 N. HWY. 201, MOUNTAIN HOME, AR 72653

Facility Information (FRS)

FRS ID: 110000743599
EPA Region: 06
Latitude: 36.360028
Longitude: -92.386083
Locational Data Source: NPDES
Industry: Unsupported Plastics Film And Sheet (Except Packaging) Manufacturing, Pharmaceutical Preparation Manufacturing, Small Arms Manufacturing, Surgical And Medical Instrument Manufacturing
ICIS-Air Source ID: AR0000000500900002
ICIS-Air Facility Status: Operating Synthetic Minor Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 1073211
- Greenhouse Gas Reporting Program (GHGRP): No Information
- Toxics Release Inventory (TRI): 72653BXTRM1800R
- Clean Air Markets Division (CAMD): No Information

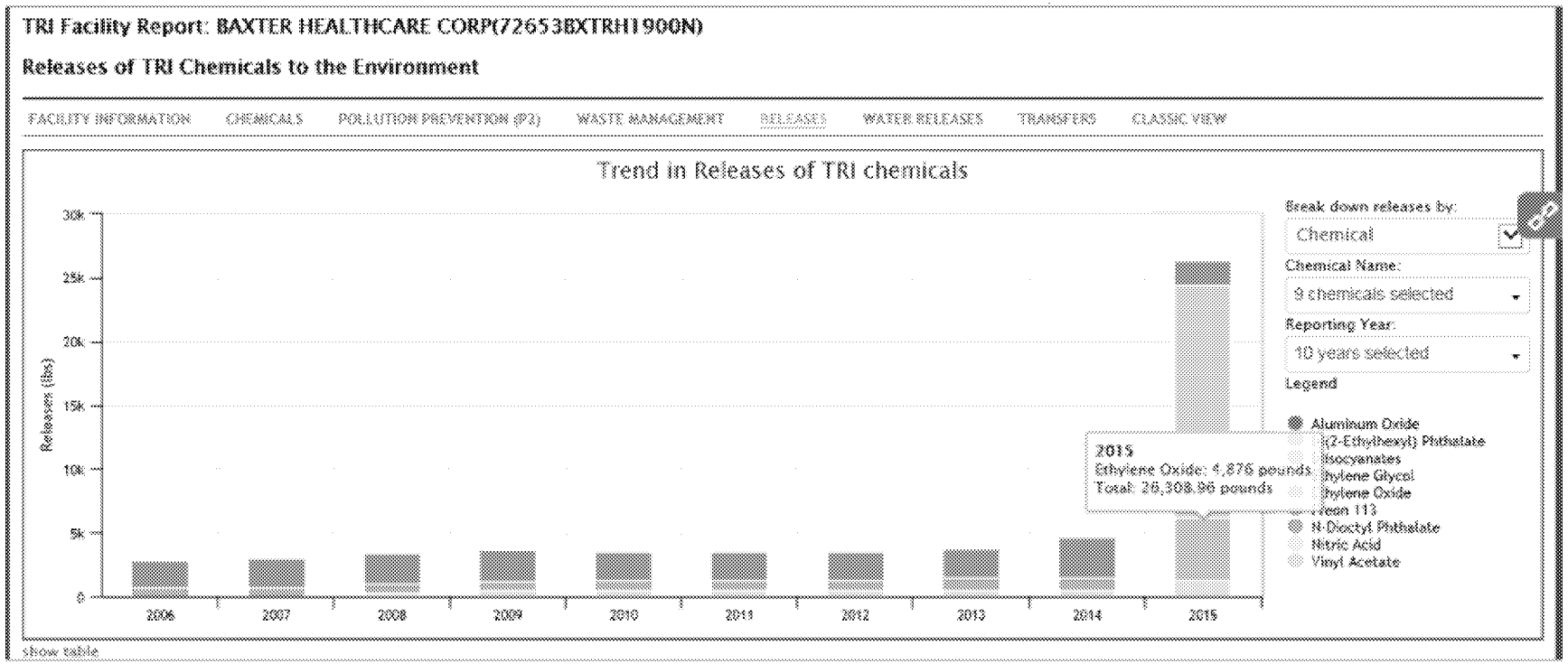
Search for Excess Emission Reports
Search for Spills

Total Aggregate Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Total HAPs	Pounds							2,555.00			2,931.00	
TRI	TRI Air Toxics	Pounds		2,022.00	2,256.00	2,460.00	2,880.00	2,515.00	2,555.00	2,485.00	2,805.00	2,931.00	8,011.00
TRI	TRI HAPs	Pounds		2,017.00	2,251.00	2,455.00	2,875.00	2,515.00	2,555.00	2,485.00	2,805.00	2,931.00	8,011.00
TRI	TRI Ozone Precursors	Pounds		2,017.00	2,251.00	2,455.00	2,875.00	2,515.00	2,555.00	2,485.00	2,805.00	2,931.00	8,011.00

Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene glycol	Pounds							5.00			5.00	
TRI	Di(2-ethylhexyl) phthalate	Pounds		1,276.00	1,575.00	1,750.00	1,700.00	1,800.00	1,500.00	1,400.00	1,600.00	1,726.00	1,624.00
TRI	Ethylene glycol	Pounds		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	230.00
TRI	Ethylene oxide	Pounds		656.00	650.00	700.00	720.00	760.00	800.00	850.00	950.00	950.00	4,676.00
NEI	Di(2-ethylhexyl) phthalate	Pounds							1,500.00			1,726.00	
TRI	Vinyl acetate	Pounds				50.00	250.00	250.00	250.00	250.00	250.00	250.00	1,281.00
NEI	Ethylene oxide	Pounds							600.00			950.00	
TRI	Nitric acid	Pounds		5.00	5.00	5.00	5.00						
NEI	Vinyl acetate	Pounds							250.00			250.00	



* 2015 was the highest ETO emissions (4,876 lb) w.r.t. previous years (850-900 lb).

Baxter Healthcare Corporation
Permit #: 0544-AR-13
AFIN: 03-00002

Total Allowable Emissions

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	1.3	3.8
PM_{10}	1.0	2.7
$PM_{2.5}$	See Note*	
SO_2	1.0	0.8
VOC	99.9	94.6
CO	6.9	26.4
NO_x	9.0	31.6
Ethylene Oxide (EtO)**	1.23	5.5
Ethylene Glycol	1.0	0.05
Single HAP	-	9.5
Total HAP	-	23.75

*$PM_{2.5}$ limits are source specific, if required. Not all sources have $PM_{2.5}$ limits.
** HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year ①

Chemical Name	2015	2014	2013	2012	2011	2010	2009	2008	2007
ALUMINUM OXIDE (FIBROUS FORMS)									
DI(2-ETHYLHEXYL) PHTHALATE	51,461	37,236	2,355	2,155	2,255	2,255	2,455	2,455	2,231
DIISOCYANATES									
ETHYLENE GLYCOL	225,802	27,305	185,705	100,105	154,305	175,605	28,505	65,010	10
ETHYLENE OXIDE	16,594	12,550	12,514	11,030	10,600	9,860	8,120	8,300	7,850
FREON 113									
HYDROCHLORIC ACID (1995 AND AFTER ACID AEROSOLS ONLY)									
N-DIOCTYL PHTHALATE									
NITRIC ACID							35	35	35
VINYL ACETATE	9,728	10,263	9,450	19,450	24,450	25,150	15,250	250	

Union Carbide

[HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110000597104"]

Facility Summary

UNION CARBIDE
355 STATE HWY 3142 GATE 28, HAHNVILLE, LA 70057

Facility Information (FRS)

FRS ID: 110000597104
EPA Region: 06
Latitude: 29.987341
Longitude: -90.445067
Locational Data Source: EIS
Industry: Petrochemical Manufacturing, All Other Basic Organic Chemical Manufacturing, Plastics Material And Resin Manufacturing, Industrial Gas Manufacturing
ICIS-Air Source ID: LA00000022089000 01
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 7202911
- Greenhouse Gas Reporting Program (GHGRP): 1007031
- Toxics Release Inventory (TRI): 70057NNCRBHWY31
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

NEI data from EIS site

Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_Cr_Aug	2014EPA_GHG	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Louisiana Department of Environmental Quality
Ethylene Oxide	LB	30,064.8027	30,064.8027	30,064.8027	-	-	-	-	-	30,051.0000	30,064.8027

TRI data + NEI data from ECHO

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		11,930.00	22,958.00	16,360.00	23,500.00	25,860.00	35,400.00	42,840.00	42,208.00	30,051.00	27,797.00
NEI	Ethylene oxide	Pounds				16,359.96			35,284.75			30,064.80	

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Oxide Plant
Agency Interest No.: 2083 Permit No. 476-V4
Union Carbide Corporation - St Charles Operations
Taft, St. Charles Parish, Louisiana

Background

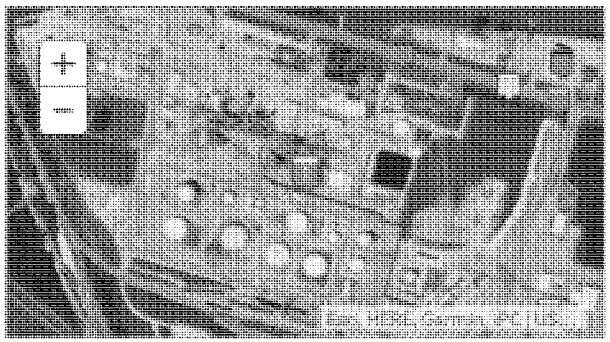
Union Carbide Corporation (UCC), a subsidiary of the Dow Chemical Company, owns and operates Taft/Star Manufacturing Complex, an existing chemical manufacturing facility that began operation prior to 1969. The Union Carbide Corp - St Charles Operations operates the Oxide I and Oxide II Plants under separate permits, Permit Nos. 476-V3 issued October 22, 2010, and 373-V4 issued March 22, 2013, respectively.

This permit is the renewal and modification for the Title V Permit No. 476-V3 for the Oxide I Plant, and also incorporates the Oxide II Plant sources (flares) into the Oxide I Plant Title V permit, thus consolidating both Title V permits into one Title V Permit No. 476-V4 considered as only the Oxide Plant.

LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):			
Pollutant	**Before[1]**	**After[2]**	**Change**
1,2-Dichloroethane	0.395	0.641	+0.246
1,4-Dioxane	0.01	<0.01	-0.01
Acetaldehyde	1.05	0.60	-0.45
Acrolein	0.08	0.00	-0.08
Chloroethane	0.08	<0.01	-0.08
Ethylene Glycol	6.84	0.34	-6.5
Ethylene Oxide	5.48	7.131	+1.651
Formaldehyde	<0.01	<0.01	0
Hydrochloric Acid	8.75	0.07	-8.68
Naphthalene	1.01	0.16	-0.85

Taminco US Inc., Iberville, LA

Facility Summary



TAMINCO HIGHER AMINES
3790 HIGHWAY 30, SAINT GABRIEL, LA 70776

Facility Information (FRS)

FRS ID: 110056972432
EPA Region: 06
Latitude: 30.250833
Longitude: -91.092278
Locational Data Source: TRIS
Industry: All Other Basic Organic Chemical Manufacturing, All Other Miscellaneous Chemical Product And Preparation Manufacturing, Petrochemical Manufacturing
ICIS-Air Source ID: LA0000002204700031
ICIS-Air Facility Status: Operating Major Emissions

Emission Inventories

- [x] National Emissions Inventory (NEI): 5504811
- [x] Greenhouse Gas Reporting Program (GHGRP): 1004985
- [x] Toxics Release Inventory (TRI): 70776RPRDCHIGHW
- [x] Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Related Reports

Detailed Facility Report

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				.04			1,060.83			2,298.94	
TRI	Ethylene oxide	Pounds						773.00	1,680.00	1,578.00	1,422.00	1,000.00	2,551.00

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Louisiana Department of Environmental Quality
HAP	75218	Ethylene Oxide	LB	2,298.9399	2,298.9399	2,298.9399	-	-	-	-	1,000.0000	2,298.9399

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

St. Gabriel Plant
Agency Interest No.: 3263
Taminco US LLC
St. Gabriel, Iberville Parish, Louisiana

Background

Taminco US LLC, a subsidiary of Eastman Chemical Company, owns and operates the St. Gabriel Plant located at 3790 Highway 30 in Iberville Parish, Louisiana. The site (formerly Air Products and Chemicals, Inc.) had an ownership transfer to Taminco US Inc. on October 17, 2006. Taminco US Inc. changed its company name to Taminco US LLC on December 1, 2015. The facility previously operated under Permit No. 1280-00031-V12, issued December 22, 2015.

Origin

A permit application and Emission Inventory Questionnaire were submitted by Taminco US LLC on May 12, 2016, requesting a Part 70 operating permit renewal and modification. Additional information dated November 14, 2016 was also received.

Estimated emissions in tons per year are as follows:

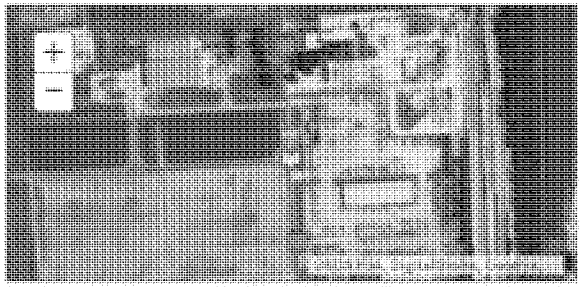
Pollutant	Before	After	Change
PM_{10}	21.38	21.21	-0.17
$PM_{2.5}$	21.38	21.21	-0.17
SO_2	0.71	0.56	-0.15
NO_X	118.90	116.58	-2.32
CO	4.02	3.52	-0.50
VOC	123.65	123.63	-0.02

LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Acetaldehyde	0.87	0.87	-
Acrylonitrile	0.45	0.45	-
Ammonia	9.39	9.41	+0.02
Benzene	0.09	0.09	-
n-Butyl Alcohol	0.05	0.06	+0.01
Chlorine	0.03	0.03	-
Ethylene Glycol	2.06	2.06	-
Ethylene Oxide	2.00	1.74	-0.26
Formaldehyde	0.03	0.03	-
Sulfuric Acid	<0.01	<0.01	-
Total	14.98	14.75	-0.23

AIR PRODUCTS PERFORMANCE MANUFACTURING INC [HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110017758381"]

Facility Summary



AIR PRODUCTS PERFORMANCE MANUFACTURING INC
474 W. 19TH ST, RESERVE, LA 70084

Facility Information (FRS)

FRS ID: 110017758381
EPA Region: 06
Latitude: 30.06793
Longitude: -90.57826
Locational Data Source: FRS
Industry: Surface Active Agent Manufacturing, All Other Basic Organic Chemical Manufacturing
ICIS-Air Source ID: LA0000002209500023
ICIS-Air Facility Status: Operating Minor Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 5287111
- Greenhouse Gas Reporting Program (GHGRP): No Information
- Toxics Release Inventory (TRI): 70094LCLCX420NO
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		1,710.00	1,132.35	1,698.32	1,649.32	1,922.32	1,758.32	1,995.32	2,052.32	3,323.00	3,165.27
NEI	Ethylene oxide	Pounds				2,381.00			2,661.00			3,221.90	

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Products Performance Manufacturing, Inc. - Reserve Plant
Agency Interest No.: 13560
Air Products Performance Manufacturing, Inc.
Reserve, St. John the Baptist Parish, Louisiana

BACKGROUND

Air Products Manufacturing, Inc. (Air Products) owns and operates the Reserve Plant, an alkoxylate alcohols production facility, located about five miles west of Reserve, Louisiana. The site was originally permitted under Permit No. 1960, issued to Alcolac, Inc. Previously, the plant was grandfathered. Shell Chemical Company acquired ownership of the Reserve Plant on February 20, 1991; TOMAH Reserve, Inc. (Tomah), purchased the site August 1, 1999. Air Products became the owner/operator of the Reserve Plant in October 2007.

The facility currently operates under Permit No. 2580-00023-06 dated November 14, 2011 and amended June 20, 2014.

ORIGIN

A permit application and Emission Inventory Questionnaire (EIQ) dated September 8, 2016, were received requesting a minor modification of the permit. Additional information dated October 13 and 20, 2016 was also received.

Estimated emissions from this facility in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	2.54	2.55	+0.01
$PM_{2.5}$[a]	--	2.55	+2.55
SO_2	0.06	0.06	-
NO_X	8.87	8.81	-0.06
CO	7.35	7.32	-0.03
VOC[b]	71.80	71.80	-

[a] Existing but not previously required to report
[b] VOC speciation in tons per year:

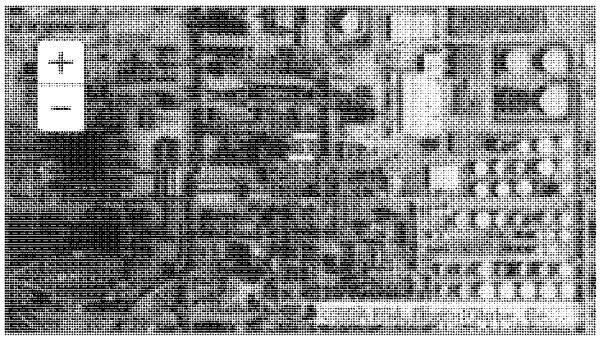
VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs)

Pollutant	Before	After	Change
Acetaldehyde	2.74	2.74	-
Ethylene oxide (EO)	1.89	1.89	-
Glycol ethers (Table 51.3)	0.083	0.09	+0.007
Methyl Isobutyl Ketone	8.89	8.99	+0.10
n-butyl alcohol	2.69	2.70	+0.01
Propylene oxide (PO)	1.04	1.04	-
Butylene Oxide (BO)	0.48	0.47	-0.01
Dioxane	3.21	3.21	-
Ethylene Glycol	<0.01	<0.01	-
Total VOC TAPs	21.02	21.13	+0.11
Other VOC's	50.78	50.67	-0.11

Sasol Chemicals (USA), LLC

[HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110017418061"]

Facility Summary



SASOL CHEMICALS (USA), LLC
2201 OLD SPANISH TRAIL, WESTLAKE, LA 70669

Facility Information (FRS)

FRS ID: 110017418061
EPA Region: 06
Latitude: 30.241902
Longitude: -93.274446
Locational Data Source: EIS
Industry: All Other Basic Organic Chemical Manufacturing, All Other Basic Inorganic Chemical Manufacturing, Industrial Gas Manufacturing, Petrochemical Manufacturing
ICIS-Air Source ID: LA0000002201900003
ICIS-Air Facility Status: Operating Major Emissions

Emission Inventories

- [x] National Emissions Inventory (NEI): 8468011
- [x] Greenhouse Gas Reporting Program (GHGRP): 1005823
- [x] Toxics Release Inventory (TRI): 70669VSTCHOLDSP
- [x] Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Related Reports

Detailed Facility Report

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				4,526.21			5,869.18			12,639.73	
TRI	Ethylene oxide	Pounds		4,232.00	4,099.00	4,527.00	3,237.00	3,942.00	5,875.00	6,309.00	5,999.00	12,645.00	17,861.00

EIS Facility ID	Agency Identifier	Program System Code	State	County	State and County Code	Tribal Name	Facility Name	Company Name	NAICS Code	Facility Source Type	Operating Status	Site Latitude	Site Longitude	Physical Address
8468011	3271	LADE208	LA	Calcasieu	22019		Sasol Chemicals (USA) LLC - Lake Charles	Sasol Chemicals (USA) LLC	325199	Chemical Plant	OP	30.241902	-93.274446	2201 Old Spanish Trail

Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_CY_Aug	2014EPA_GHG	2014EPA_HAPAug	2014EPA_PM_Aug	2014EPA_PMspecies	2014EPA_TRI	Louisiana Department of Environmental Quality
Ethylene Oxide	LB	12,639.7891	12,639.7891	12,639.7891	-	-	-	-	-	12,645.0000	12,639.7891

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

ETHOXYLATION UNITS
LAKE CHARLES CHEMICAL COMPLEX
AGENCY INTEREST NO. 3271
SASOL CHEMICALS (USA) LLC
WESTLAKE, CALCASIEU PARISH, LOUISIANA

LAC 33:III. Chapter 51 Regulated Toxic Air Pollutants (TAP) (tons/yr)			
Pollutant	Before	After	Change
Acetaldehyde	0.26	0.26	-
Ethylene Oxide	13.99	13.99	-
Formaldehyde	-	0.01	+ 0.01
n-Hexane	-	0.02	+ 0.02
n-Butyl Alcohol	45.00	45.00	-

Shell Chemical LP – Gisemar Plant [HYPERLINK "https://echo.epa.gov/detailed-facility-report?fid=110000743394"]

Facility Site

Facility Site | Release Points | Emissions Units | Processes

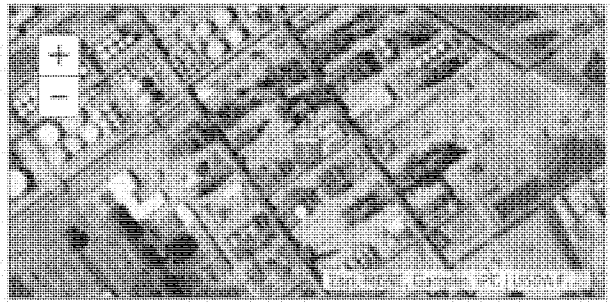
Facility Information

2014 Emissions View

EIS Facility ID:	7445611
Agency Identifier:	1136 (LADEQ08)
State and County FIPS:	22005 (Ascension, Louisiana)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Louisiana Department of Environmental Quality
Facility Name:	Shell Chemical LP - Geismar Plant
Facility Description:	SHELL CHEMICAL LP
Company Name:	Shell Chemical LP
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	2008
Physical Address:	7594 Hwy 75
Supplemental Address:	
Locality:	Geismar
State:	Louisiana
Zip Code:	70734
Address Comment:	MULTIPLE 2006 EMISSIONS SHELL CHEMICAL GEISMAR

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Louisiana Department of Environmental Quality
HAP	75218	Ethylene Oxide	LB	9,658.0674	9,658.0674	9,658.0674	-	3.6463	-	-	9,669.0000	9,658.0674

Facility Summary



SHELL CHEMICAL LP - GEISMAR PLANT
7594 HIGHWAY 75, GEISMAR, LA 70734

Facility Information (FRS)

FRS ID: 110000743394
EPA Region: 06
Latitude: 30.184575
Longitude: -90.99222
Locational Data Source: EIS
Industry: Petrochemical Manufacturing, All Other Basic Organic Chemical Manufacturing
ICIS-Air Source ID: LA0000002200500010
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 7445611
- Greenhouse Gas Reporting Program (GHGRP): 1001036
- Toxics Release Inventory (TRI): 70737SHLLCRIVER
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		12,525.00	7,752.00	22,949.00	7,493.00	7,566.00	8,225.00	7,998.00	23,479.00	9,869.00	5,828.00
NEI	Ethylene oxide	Pounds				10,024.84			3,026.05			9,658.07	

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Shell Chemical Company –Geismar Plant
M Unit
Agency Interest No.: 1136
Shell Chemical LP
Geismar, Ascension Parish, Louisiana

Shell Chemical LP proposes to renew/modify the current permit as follows:

1. Increase the production of M-Unit based on reduced batch times, improved reliability and flexibility with feed and product movements;
2. Delete Acetic Storage Tank T-M111, Emission Point 08E-12, because this tank was never built;
3. Incorporate M5 Jet System Vent J-M241 and M6 Jet System Vent J-M251, currently permitted as Insignificant Activity, as emission sources;
4. Remove the Organic Compound requirements or LAC 33:III.Chapter 21 from M1-M6 Hotwell Vents, Emission Points 09-83 and 11-83, because they meet the exemption requirements;
5. Updated the NESHAP, 40 CFR 63 Subpart PPP based on the requirements promulgated on March 27, 2014, as appropriate;
6. Incorporate the requirements of NESHAP, 40 CFR 63 Subpart PPP for Heat Exchangers, Emission Point HON CWHE.

Estimated emissions from the M Unit in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	-	-	-
SO_2	-	-	-
NO_X	-	-	-
CO	-	-	-
VOC *	7.04	7.40	+ 0.36

*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):			
Pollutant	Before	After	Change
Acetaldehyde	0.04	0.04	-
Ethylene glycol	0.21	0.23	+ 0.02
Ethylene oxide	1.23	1.17	- 0.06
Total	**1.48**	**1.44**	**- 0.04**
Other VOC		**5.96**	

*emissions in NEI exceeds permit emission limits

The Dow Chemical Co - Louisiana Operations

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

All 4 Emissions
View

EIS Facility ID:	8467311
Agency Identifier:	1409 (LADEQ08)
State and County FIPS:	22047 (Iberville, Louisiana)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Louisiana Department of Environmental Quality
Facility Name:	The Dow Chemical Co - Louisiana Operations
Facility Description:	THE DOW CHEMICAL COMPANY
Company Name:	The Dow Chemical Co
NAICS:	325199 - All Other Basic Organic Chemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	2008
Physical Address:	21255 Hwy 1
Supplemental Address:	
Locality:	Plaquemine
State:	Louisiana

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_CI_Aug	2014EPA_EGU	2014EPA_OHG	2014EPA_NAFAug	2014EPA_PM Aug	2014EPA_PMInspection	2014EPA_TRI	Louisiana Department of Environmental Quality
HAP	75218	Ethylene Oxide	LB	3,604.3911	3,604.3911	3,604.3911	-	-	-	-	-	-	3,609.0000	3,604.3911

Facility Summary

THE DOW CHEMICAL CO - LOUISIANA OPERATIONS
21255 HIGHWAY 1, PLAQUEMINE, LA 70764

Facility Information (FRS)

FRS ID: 110001244724
EPA Region: 06
Latitude: 30.320903
Longitude: -91.239015
Locational Data Source: EIS
Industry: null, All Other Basic Organic Chemical Manufacturing, Fossil Fuel Electric Power Generation, Alkalies And Chlorine Manufacturing, Gum And Wood Chemical Manufacturing, Plastics Material And Resin Manufacturing, Other Electric Power Generation, All Other Miscellaneous Chemical Product And Preparation Manufacturing, Petroleum Refineries
ICIS-Air Source ID: LA0000002204700096, LA0000002204700008, LA0000002204790096
ICIS-Air Facility Status: Permanently Closed Major Emissions, Operating Major Emissions, Permanently Closed Minor Emissions

Emission Inventories

- [x] National Emissions Inventory (NEI): 8467311
- [x] Greenhouse Gas Reporting Program (GHGRP): 1000816
- [x] Toxics Release Inventory (TRI): 70765THDWCHIGHW
- [x] Clean Air Markets Division (CAMD): 55419

Search for Excess Emission Reports
Search for Spills

Total Aggregate Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		4,944.00	7,299.00	4,435.00	4,321.00	5,590.00	3,163.00	3,653.00	3,296.00	3,609.00	4,512.00
NEI	Ethylene oxide	Pounds				4,436.00			3,136.33			3,804.39	

AIR PERMIT BRIEFING SHEET
AIR PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

GLYCOL II PLANT
THE DOW CHEMICAL COMPANY
AI NO. 1409
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Background

The Dow Chemical Company operates the Glycol II Plant. Permit No. 2203 was issued on August 5, 1993. The Permit No. 2203 (M-1), dated February 5, 2001, the Permit No. 2203 –V0, dated January 3, 2005, Permit No 2203-V1, dated June 20, 2005 and Permit No. 2203 –V2, dated July 8, 2010. Currently, the facility operates under Permit No. 2203-V3, dated December 22, 2010 and an amended on June 12, 2014.

This is the Part 70 operating permit for the facility.

Origin

The Dow Chemical Company submitted an application dated December 18, 2014 requesting a Part 70 permit renewal/modification. Additional information dated February 19, 2015, April 9, 2015 and June 18, 2015 were also received.

GLYCOL II PLANT
THE DOW CHEMICAL COMPANY
AI NO. 1409
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Chlorine	0.38	0.38	-
Chloroethane	0.27	0.36	+0.09
Chloroform	0.01	-	-0.01
Diethanolamine	0.20	0.08	-0.12
Ethylene Glycol	3.99	3.82	-0.17
Ethylene Oxide	4.98	7.14	+2.16
Formaldehyde	0.11	0.01	-0.10
Hydrochloric Acid	0.20	0.20	-
Methanol	0.04	0.03	-0.01
Methyl Chloride	0.02	0.02	-
Propionaldehyde	0.03	0.02	-0.01
Propylene Oxide	0.17	0.20	+0.03
Sulfuric Acid	0.02	0.01	-0.01
Tetrachloroethylene	0.01	-	+0.01
Trichloroethylene	0.01	-	+0.01
Vinyl Chloride	0.06	0.05	-0.01
Trans-1,3-Dichloropropane	0.01	0.01	-
Total	14.47	17.74	+3.27

Santa Teresa Facility

Facility Site

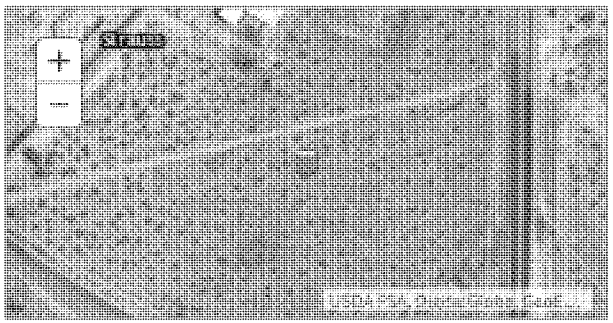
Facility Site | Release Points | Emissions Units | Processes

Facility Information

EIS Facility ID:	7582111
Agency Identifier:	350130007 (NMED)
State and County FIPS:	35013 (Dona Ana, New Mexico)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	New Mexico Environment Department Air Quality Bureau
Facility Name:	STERIGENICS-SANTA TERESA FACILITY
Facility Description:	Ethylene Oxide Sterilization
Company Name:	Na
NAICS:	561910 - Packaging and Labeling Services
Facility Source Type:	
Facility Category:	Unknown
Operating Status:	Operating but State/Local/Tribe Not Reporting Emissions
Operating Status Year:	2012
Physical Address:	2400 Airport Rd
Supplemental Address:	
Locality:	Santa Teresa
State:	New Mexico

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014EPA_TRI
HAP	75218	Ethylene Oxide	LB	5,761.0000	5,761.0000	5,761.0000

Facility Summary



STERIGENICS US LLC
2400 AIRPORT RD., SANTA TERESA, NM 88008

Facility Information (FRS)

FRS ID: 110080472541
EPA Region: 06
Latitude: 31.858333
Longitude: -106.6875
Locational Data Source: TRIS
Industry: Packaging and Labeling Services
ICIS-Air Source ID: NM0000003501300007
ICIS-Air Facility Status: Operating Minor Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 7582111
- Greenhouse Gas Reporting Program (GHGRP): No Information
- Toxics Release Inventory (TRI): 88008GRFFT2400A
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Total Aggregate Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Total HAPs	Pounds							13,068.00			5,761.00	
TRI	TRI Air Toxics	Pounds		14,759.00	14,022.00	15,439.00	11,485.00	12,421.00	13,068.00	12,362.00	10,082.00	5,761.00	1,018.00
TRI	TRI HAPs	Pounds		14,759.00	14,022.00	15,439.00	11,485.00	12,421.00	13,068.00	12,362.00	10,082.00	5,761.00	1,018.00
TRI	TRI Ozone Precursors	Pounds		14,759.00	14,022.00	15,439.00	11,485.00	12,421.00	13,068.00	12,362.00	10,082.00	5,761.00	1,018.00

Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		14,759.00	14,022.00	15,439.00	11,485.00	12,421.00	13,068.00	12,362.00	10,082.00	5,761.00	1,003.00
NEI	Ethylene oxide	Pounds							13,068.00			5,761.00	
TRI	Propylene oxide	Pounds		.00	.00	.00	.00	.00	.00				15.00

Port Neches Plant -

Facility Information

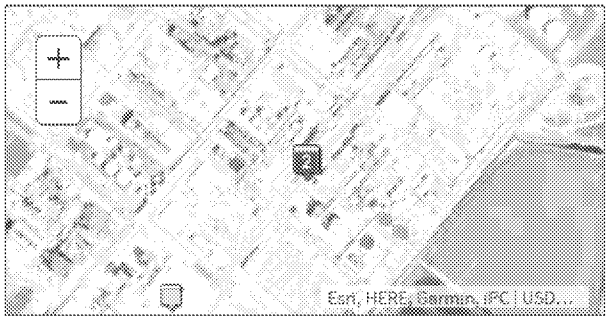
2014 Emissions
View

EIS Facility ID:	4945211
Agency Identifier:	6 (TXCEQ)
State and County FIPS:	48245 (Jefferson, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	PORT NECHES PLANT
Facility Description:	2102 SPUR 136
Company Name:	HUNTSMAN PETROCHEMICAL LLC
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	2011
Physical Address:	2102 SPUR 136
Supplemental Address:	
Locality:	PORT NECHES
State:	Texas
Zip Code:	77651
Address Comment:	
EIS Comment:	
HAP Facility Category:	
Permit Status:	

Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAP-Aug_PMaug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
Ethylene Oxide	LB	21,552.0000	21,552.0000	21,552.0000	-	-	-	-	-	42,453.0000	21,552.0000

[HYPERLINK "https://echo.epa.gov/detailed-facility-report?fid=110000504801"]

Facility Summary



TPC GROUP
2102 SPUR 136, PORT NECHES, TX 77651

Facility Information (FRS)

FRS ID: 110000504801
EPA Region: 06
Latitude: 29.964146
Longitude: -93.930138
Locational Data Source: EIS
Industry: All Other Basic Organic Chemical Manufacturing, Petrochemical Manufacturing
ICIS-Air Source ID: TX0000004824500715
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 4945211
- Greenhouse Gas Reporting Program (GHGRP): 1002884
- Toxics Release Inventory (TRI): 77651TXSPT212SP
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				47,120.80			27,570.20			21,552.00	

*Almost double the emissions reported in TRI

* No EtO data in TRI

Facility Site

Facility Site | Release Points | Emissions Units | Processes

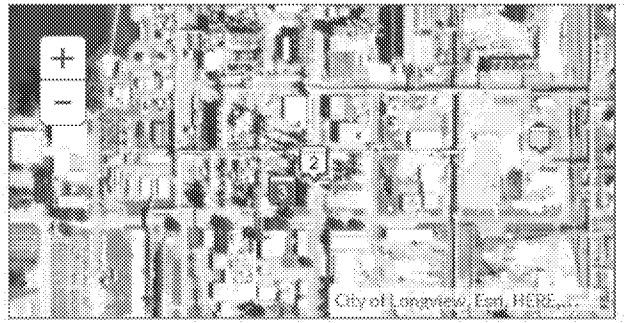
Facility Information

-- Emissions Year --
View

EIS Facility ID:	4941511
Agency Identifier:	19 (TXCEQ)
State and County FIPS:	48203 (Harrison, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	TEXAS OPERATIONS
Facility Description:	HWY 149 KODAK BLVD
Company Name:	EASTMAN CHEMICAL COMPANY
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1979
Physical Address:	HWY 149 KODAK BLVD
Supplemental Address:	
Locality:	LONGVIEW
State:	Texas
Zip Code:	75607
Address Comment:	

Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_Cr_Aug	2014EPA_HAP-Aug_PMaug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
75218	Ethylene Oxide	LB	14,827.7988	14,827.7988	14,827.7988	-	-	0.1000	-	-	22,688.0000	14,827.7988

Facility Summary



TX EASTMAN DIV/EASTMAN CHEMICA
300 KODAK BLVD, LONGVIEW, TX 75602

Facility Information (FRS)

FRS ID: 110000743704
EPA Region: 06
Latitude: 32.438056
Longitude: -94.69
Locational Data Source: EIS
Industry: Petrochemical Manufacturing, All Other Basic Organic Chemical Manufacturing, Fossil Fuel Electric Power Generation, Plastics Material And Resin Manufacturing, Men's And Boys' Cut And Sew Apparel Contractors
ICIS-Air Source ID: TX0000004820300019
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 4941511
- Greenhouse Gas Reporting Program (GHGRP): 1007438
- Toxics Release Inventory (TRI): 75607TXSSTOFFHI
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				19,808.90			13,441.20			14,827.80	
TRI	Ethylene oxide	Pounds		16,400.00	17,800.00	20,200.00	17,800.00	13,161.00	13,220.00	14,623.00	12,897.00	22,689.00	15,130.00

Huntsman Petrochemical- Conroe Facility

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

EIS Facility ID:	4945611
Agency Identifier:	5 (TXCEQ)
State and County FIPS:	48339 (Montgomery, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	CONROE FACILITY
Facility Description:	5451 JEFFERSON CHEMICAL RD
Company Name:	HUNTSMAN PETROCHEMICAL LLC
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1980
Physical Address:	5451 JEFFERSON CHEMICAL RD
Supplemental Address:	
Locality:	CONROE
State:	Texas
Zip Code:	77305
Address Comment:	

-- Emissions Year --
View

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAP Aug_PMaug	2014EPA_HAPAug	2014EPA_PM Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
HAP	75218	Ethylene Oxide	LB	5,338.6001	5,338.6001	5,338.6001	-	-	-	-	-	5,561.0000	5,338.6001

Facility Summary

HUNTSMAN PETROCHEMICAL LLC

5451 JEFFERSON CHEMICAL ROAD, CONROE, TX 77301

Facility Information (FRS)

FRS ID: 110000748026
EPA Region: 06
Latitude: 30.316129
Longitude: -95.387683
Locational Data Source: FRS
Industry: Petrochemical Manufacturing, All Other Basic Organic Chemical Manufacturing, Petroleum Refineries
ICIS-Air Source ID: TX0000004833900005, TX0000004833900090
ICIS-Air Facility Status: Operating Major Emissions, Permanently Closed Minor Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 4945611
- Greenhouse Gas Reporting Program (GHGRP): 1002293
- Toxics Release Inventory (TRI): 77501TXCHJEFFE
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Emissions

Program	Pollutant	Units	Trend	2006	2007	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018
TRI	Ethylene oxide	Pounds		7,550.00	7,199.00	9,756.00	9,816.00	7,217.00	6,921.00	6,759.00	5,805.00	5,561.00	7,704.00		
NEI	Ethylene oxide	Pounds				9,719.60			5,986.00			5,336.60			

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

EIS Facility ID:	4853011
Agency Identifier:	21 (TXCEQ)
State and County FIPS:	48157 (Fort Bend, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	HOUSTON PLANT
Facility Description:	15200 ALMEDA RD
Company Name:	AKZO NOBEL SURFACE CHEMISTRY LLC
NAICS:	325613 - Surface Active Agent Manufacturing
Facility Source Type:	
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1980
Physical Address:	15200 ALMEDA RD
Supplemental Address:	
Locality:	HOUSTON
State:	Texas
Zip Code:	77001
Address Comment:	

-- Emissions Year --

View

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_NAP Aug_PMaug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
HAP	75218	Ethylene Oxide	LB	504.6000	504.6000	504.6000	-	-	-	-	515.0000	504.6000

***Different zip code in ECHO and all permits (77053) (right street address and zip code as in spreadsheet and EIS) – I think zip code needs to be corrected in EIS database**

*** No EI # data in ECHO**

Akzo Nobel Surface Chemistry, L.L.C.

15200 Almeda Road

Houston, Texas 77053

Re: Effective Permit Approval

Initial Issuance

Permit Number: O1328

Akzo Nobel Surface Chemistry, L.L.C.

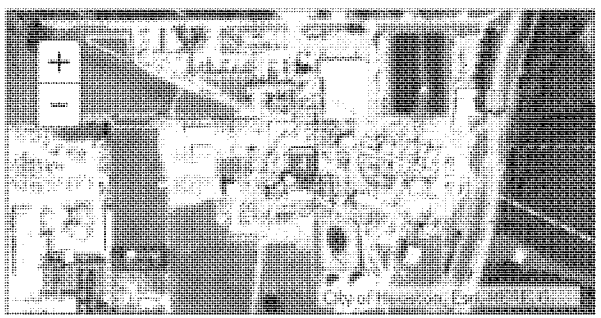
Houston Plant

Houston, Harris County

Regulated Entity Number: RN100219393

Customer Reference Number: CN601580566

Facility Summary



AKZO NOBEL SURFACE CHEMISTY LLC
15200 ALMEDA RD, HOUSTON, TX 77053

Facility Information (FRS)

FRS ID: 110000461884
EPA Region: 06
Latitude: 29.583889
Longitude: -95.433889
Locational Data Source: RMP
Industry: null, Surface Active Agent Manufacturing, Electroplating, Plating, Polishing, Anodizing, And Coloring, Soap And Other Detergent Manufacturing
ICIS-Air Source ID: TX0000004815700021
ICIS-Air Facility Status: Operating Major Emissions

Emission Inventories

- [x] National Emissions Inventory (NEI): No Information
- [x] Greenhouse Gas Reporting Program (GHGRP): No Information
- [x] Toxics Release Inventory (TRI): 77053WTCRG15200
- [x] Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRI	Ethylene oxide	Pounds		927.00	911.00	811.00	761.00	557.00	489.00	545.00	504.00	515.00	512.00

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
EC001A	Main Cooling Tower	VOC	0.24	1.04
EC001B	EO/PO Storage Cooling Tower	VOC	0.01	0.04
EC001C	Dioxane Stripper Cooling	VOC	0.12	0.52
EF001A	Fugitives (5)	VOC (7)	0.33	1.45
		EO	0.05	0.22
		PO	0.04	0.15
EF001C	Fugitives (5)	VOC	0.04	0.16
EF001D	ACT Pig Station	VOC	0.08	0.03
EF001E	R-200 Pig Station	VOC	0.08	0.03
EFL1	Uncollected Truck Loading	VOC	1.21	1.82
EV001	Oxylation Blend Tank T-6160	VOC	0.94 (6)	0.10
EV002	Oxylation Blend Tank T-6170	VOC	0.94 (6)	0.10
EV003	Oxylation Blend Tank T-6150	VOC	0.94 (6)	0.10
EV1	Venturi Scrubber	Phosphoric Acid	0.001	0.22
EV2	Stripper	VOC	0.33	0.58
EV3	Drum Loading Scrubber	VOC	0.32	0.06
EV3FUG	Uncollected Drum Loading	VOC	0.05	<0.01
EV4	V-004 Scrubber	VOC (7)	18.60	4.39
		EO	0.26	0.04
		PO	0.11	0.01
EV5	Reactor V-008 Scrubber	VOC	4.52	0.87
EW-A-FUG	Wastewater System Emissions	VOC	0.22	0.97
FUG099	Tank 099 Fugitives (5)	VOC	0.02	0.07
FUG167	Tank 167 Fugitives (5)	VOC	0.04	0.16
FUG270	Tank 270 Fugitives (5)	VOC	0.05	0.22
FUG271	Tank 271 Fugitives (5)	VOC	0.05	0.22
FUG280	Tank 280 Fugitives (5)	VOC	0.08	0.34
FUG281	Tank 281 Fugitives (5)	VOC	0.07	0.30
R-400	Scrubber	EO		0.04
		PO		0.02

R-400FUG	Fugitives (5)	EO	0.06	0.28
		PO	0.03	0.13
T099	Hold Tank	VOC	0.94	0.06
T167	Witco C-5466 Tank	VOC	2.74	0.16
T270	Blend Tank	VOC	0.01	0.01
T271	Blend Tank	VOC	0.01	0.01
T280	Blend Tank	VOC	0.01	0.03
T281	Blend Tank	VOC	0.01	0.01

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

EO – ethylene oxide

PO - propylene oxide

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

(6) Only one blend tank will be filled at any one time.

(7) VOC includes EO and PO emissions

Date:	September 27, 2013

Equistar Chemicals – Bayport Underwood Plant

Facility Site

Facility Site | Release Points | Emissions Units | Processes

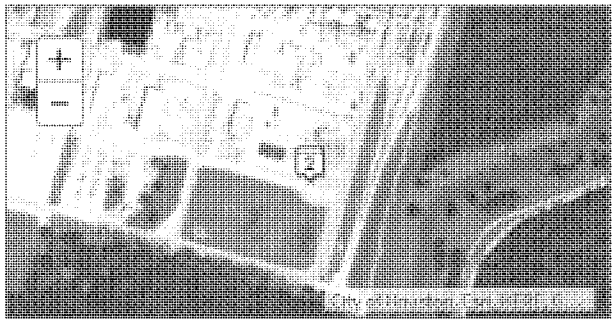
Facility Information

-- Emissions Year --
View

EIS Facility ID:	4926611
Agency Identifier:	882 (TXCEQ)
State and County FIPS:	48201 (Harris, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	BAYPORT UNDERWOOD PLANT
Facility Description:	5761 UNDERWOOD RD
Company Name:	EQUISTAR CHEMICALS LP
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1988
Physical Address:	5761 UNDERWOOD RD
Supplemental Address:	
Locality:	PASADENA
State:	Texas
Zip Code:	77587
Address Comment:	

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAP-Aug_PMaug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
HAP	75218	Ethylene Oxide	LB	13,544.7898	13,544.7898	13,544.7898	-	-	-	-	-	20,881.0000	13,544.7898

Facility Summary



EQUISTAR CHEMICALS BAYPORT CHEMICALS PLANT
5761 UNDERWOOD ROAD, PASADENA, TX 77507

Facility Information (FRS)

FRS ID: 110000508079
EPA Region: 06
Latitude: 29.627187
Longitude: -95.080194
Locational Data Source: TRIS
Industry: All Other Basic Organic Chemical Manufacturing, Petrochemical Manufacturing, Plastics Material And Resin Manufacturing
ICIS-Air Source ID: TX0000004820100882
ICIS-Air Facility Status: Operating Major Emissions

Emission Inventories

- [x] National Emissions Inventory (NEI): 4928611
- [x] Greenhouse Gas Reporting Program (GHGRP): 1006656
- [x] Toxics Release Inventory (TRI): 77507OSTRC5761U
- [x] Clean Air Markets Division (CAMD): No information

Search for Excess Emission Reports
Search for Spills

Related Reports

Detailed Facility Report

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				15,430.00			40,776.80			13,544.80	
TRI	Ethylene oxide	Pounds		2,900.00	10,500.00	30,865.00	21,264.00	18,096.00	40,178.00	17,387.00	8,448.00	20,881.00	6,868.00

Lyondell Chemical – Channel View Plant

[HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110000463221"]

Facility Site

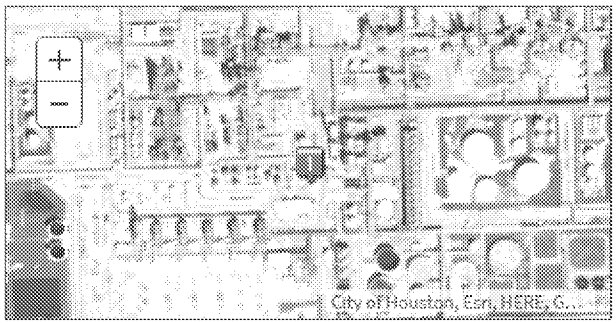
Facility Site | Release Points | Emissions Units | Processes

Facility Information

EIS Facility ID:	4941411
Agency Identifier:	417 (TXCEQ)
State and County FIPS:	48201 (Harris, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	CHANNELVIEW PLANT
Facility Description:	2502 SHELDON RD
Company Name:	LYONDELL CHEMICAL COMPANY
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1987
Physical Address:	2502 SHELDON RD
Supplemental Address:	
Locality:	CHANNELVIEW
State:	Texas
Zip Code:	77530
Address Comment:	

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_Cr_Aug	2014EPA_GHG	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
HAP	75218	Ethylene Oxide	LB	1,918.6000	1,918.6000	1,918.6000	-	-	-	-	1,920.0000	1,918.6000

Facility Summary



LYONDELL CHEMICAL CO
2502 SHELDON RD., CHANNELVIEW, TX 77530

Facility Information (FRS)

FRS ID: 110000463221
EPA Region: 06
Latitude: 29.816654
Longitude: -95.107603
Locational Data Source: EIS
Industry: All Other Basic Organic Chemical Manufacturing, Petrochemical Manufacturing
ICIS-Air Source ID: TX0000004820100417
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

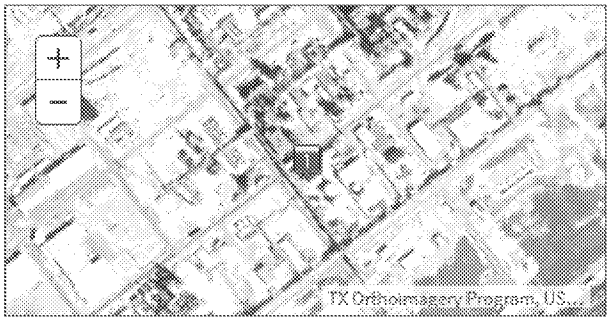
- National Emissions Inventory (NEI): 4941411
- Greenhouse Gas Reporting Program (GHGRP): 1007562
- Toxics Release Inventory (TRI): 77530RCCHM2502S
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Program	Pollutant	Unit	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				137.40	1,463.00					1,918.60	
TRI	Ethylene oxide	Pounds		5,400.00	5,802.00	468.00	10,167.00	1,125.00	1,464.00	1,086.00	1,714.00	1,920.00	1,298.00

Seadrift Operations - [HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110007175154"]

Facility Summary



SEADRIFT OPERATIONS
7501 STATE HIGHWAY 185, SEADRIFT, TX 77983

Facility Information (FRS)

FRS ID: 110007175154
EPA Region: 06
Latitude: 28.510636
Longitude: -96.771527
Locational Data Source: EIS
Industry: Petrochemical Manufacturing, All Other Basic Organic Chemical Manufacturing, Plastics Material And Resin Manufacturing, Adhesive Manufacturing
ICIS-Air Source ID: TX0000004805700003
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- [x] National Emissions Inventory (NEI): 5846511
- [x] Greenhouse Gas Reporting Program (GHGRP): 1002967
- [x] Toxics Release Inventory (TRI): 77979NNCRBPOBOX
- [x] Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Emissions Data

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				4,872.00			5,303.20			10,391.60	
TRI	Ethylene oxide	Pounds		12,738.00	26,058.00	5,308.00	4,829.00	4,324.00	5,333.00	8,207.00	9,254.00	10,393.00	9,241.00

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

EIS Facility ID:	5846511
Agency Identifier:	3 (TXCEQ)
State and County FIPS:	48057 (Calhoun, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	SEADRIFT PLANT
Facility Description:	HIGHWAY 185
Company Name:	UNION CARBIDE CORPORATION
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1979
Physical Address:	HIGHWAY 185
Supplemental Address:	
Locality:	SEADRIFT
State:	Texas
Zip Code:	77983
Address Comment:	
EIS Comment:	
HAP Facility Category:	
Permit Status:	

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014NEI Draft V1	2014NEI Final V1	2014 Responsible Agency Data	2014EPA_Cr_Aug	2014EPA_GHG	2014EPA_HAP-Aug_PM.aug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI
HAP	75218	Ethylene Oxide	LB	10,391.5998	10,391.5998	10,391.5998	-	-	-	-	-	-	10,393.0000

Clear Lake Plant

[HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110030493320"]

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

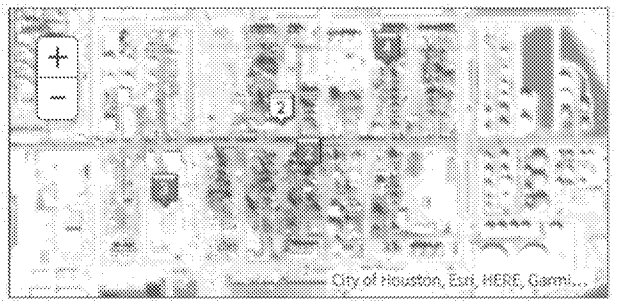
EIS Facility ID:	4057911
Agency Identifier:	3 (TXCEQ)
State and County FIPS:	48201 (Harris, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	CLEAR LAKE PLANT
Facility Description:	9502 BAYPORT BLVD
Company Name:	CELANESE LTD
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1979
Physical Address:	9502 BAYPORT BLVD
Supplemental Address:	
Locality:	PASADENA
State:	Texas
Zip Code:	77507
Address Comment:	

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_HAP-Aug_PMaug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality
HAP	75218	Ethylene Oxide	LB	11,893.4004	11,893.4004	11,893.4004	-	-	-	-	11,894.8498	11,893.4004

*** I think this is the correct facility since the other facility with same address (but different NEI #) has only 5 tpy EtO**

[HYPERLINK "https://echo.epa.gov/air-pollutant-report?fid=110030493320"]

Facility Summary



ARKEMA INC CLEAR LAKE
9502 BAYPORT BLVD STE B, PASADENA, TX 77507

Facility Information (FRS)

FRS ID: 110030493320
EPA Region: 06
Latitude: 29.624369
Longitude: -95.062877
Locational Data Source: EIS
Industry: Petrochemical Manufacturing, Industrial Gas Manufacturing, All Other Basic Organic Chemical Manufacturing, Plastics Material And Resin Manufacturing
ICIS-Air Source ID: TX0000004820101588
ICIS-Air Facility Status: Operating Major Emissions

Related Reports

Detailed Facility Report

Emission Inventories

- National Emissions Inventory (NEI): 13411211
- Greenhouse Gas Reporting Program (GHGRP): 1006797
- Toxics Release Inventory (TRI): 77507DWCHM952BB
- Clean Air Markets Division (CAMD): No Information

Search for Excess Emission Reports
Search for Spills

Emissions

Program	Pollutant	Unit	Trend	2006	2007	2008	2009	2011	2012	2013	2014	2015	2016
TRI	Ethylene oxide	Pounds						7.00	10.00	13.00	5.00	5.00	6.00

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

2014 Emissions View

EIS Facility ID:	13411211
Agency Identifier:	1583 (TXCEQ)
State and County FIPS:	48201 (Harris, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	CLEAR LAKE OPERATIONS
Facility Description:	9502 B BAYPORT BLVD B
Company Name:	ARKEMA INC
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	
Operating Status:	Operating
Operating Status Year:	2004
Physical Address:	9502 B BAYPORT BLVD B
Supplemental Address:	
Locality:	PASADENA
State:	Texas
Zip Code:	77501
Address Comment:	
EIS Comment:	
HAP Facility Category:	
Permit Status:	
Permit Status Year:	
Last updated from:	Jonathan Miller
Last updated by agency:	EIS
Last updated on:	2017-01-14 10:32 PM

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2015 Responsible Agency Data	2014EPA_GHG	2014EPA_HAP Aug_PMaug	2014EPA_HAPAug	2014EPA_PM Aug	2014EPA_PMspecies	2014EPA_TRI
HAP	75218	Ethylene Oxide	LB	5.2000	5.2000	5.2000	-	-	-	-	-	5.0000

Midwest sterilization Corp, Laredo, TX

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

-- Emissions Year --
View

EIS Facility ID:	9061511
Agency Identifier:	
State and County FIPS:	48479 (Webb, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	Midwest Sterilization Corp
Facility Description:	Na
Company Name:	
NAICS:	339113 - Surgical Appliance and Supplies Manufacturing
Facility Source Type:	
Facility Category:	Unknown
Operating Status:	Operating
Operating Status Year:	2008
Physical Address:	12010 General Milton Dr
Supplemental Address:	
Locality:	Laredo
State:	Texas
Zip Code:	78045
Address Comment:	

Facility Site Year 2014 Emissions Summary

Facility Site

Emissions

Show 25 entries

Search:

Pollutant Type	Pollutant Code	Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Final V1	2014EPA_TRI
HAP	75218	Ethylene Oxide	LB	15,738.0000	15,738.0000	15,738.0000
HAP	107211	Ethylene Glycol	LB	2.0000	2.0000	2.0000

Showing 1 to 2 of 2 entries

First Previous 1 Next Last

Download Results: CSV

Permit Amendment

Source Analysis & Technical Review

Company	**Midwest Sterilization Corporation**	Permit Number	55557
City	**Laredo**	Project Number	**166447**
County	**Webb**	Account Number	**N/A**
Project Type	**Amend**	Regulated Entity Number	**RN103376901**
Project Reviewer	**Mr. Patrick Agumadu, P.E.**	Customer Reference Number	**CN602788465**
Site Name	**Ethylene Oxide Sterilizer**		

Project Overview

Midwest Sterilization Corporation (MSC) is requesting an amendment authorization to increase ethylene oxide (EtO) usage rates from 2,500 pounds per day (lb/day) to 3,000 lb/day and from 912,500 lb/yr to 1,095,000 lb/yr. To achieve this increase, MSC is requesting to add a new sterilization chamber (bringing the total on site to eight) and an increase in charged EtO portable cylinders on site from 50 to 60. This project will result in emission changes as shown in Emission Summary Table.

Emission Summary

Air Contaminant	Current Allowable Emission Rates (tpy)	Proposed Allowable Emission Rates (tpy)	Change in Allowable Emission Rates (tpy)
PM	0.24	0.24	0.00
PM_{10}	0.24	0.24	0.00
VOC	0.18	0.18	0.00
NO_X	2.96	2.96	0.00
CO	2.48	2.48	0.00
SO_2	0.02	0.02	0.00
HAPs (EtO)	7.38	9.15	+1.77

Facility Site

Facility Site | Release Points | Emissions Units | Processes

Facility Information

2014 Emissions View

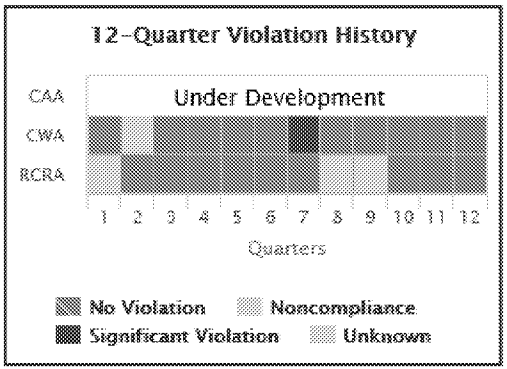
EIS Facility ID:	8465611
Agency Identifier:	2049 (LADEQ08)
State and County FIPS:	22005 (Ascension, Louisiana)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Louisiana Department of Environmental Quality
Facility Name:	BASF Corp - Geismar Site
Facility Description:	Chemical Manufacturing facility
Company Name:	BASF Corp
NAICS:	325199 - All Other Basic Organic Chemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	2008
Physical Address:	8404 River Rd (Hwy 75)
Supplemental Address:	
Locality:	Geismar
State:	Louisiana
Zip Code:	70734
Address Comment:	
EIS Comment:	
HAP Facility Category:	
Permit Status:	
Permit Status Year:	
Last updated from:	Jonathan Miller
Last updated by agency:	EIS
Last updated on:	2017-02-10 03:31 PM

Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Draft V2	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Louisiana Department of Environmental Quality
Ethylene Oxide	LB	14,278.2578	14,278.2578	14,278.2578	14,278.2578	-	-	-	-	15,185.0000	14,278.2578

Facility Summary

BASF CORP
8404 HIGHWAY 75, GEISMAR, LA 70734

FRS ID: 110000597364
EPA Region: 06
Latitude: 30.209725
Longitude: -91.012892
Locational Data Source: EIS
Industry: Utilities; Petroleum and Coal Products Manufacturing; Chemical Manufacturing
Indian Country: N



Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs in NC (of 12)	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CAA	4	12/29/2014	Significant Violation	12	12	--	1	$0	--	--
CWA	3	02/21/2017	No Violation	2	1	--	--	--	--	--
RCRA	4	06/30/2016	No Violation	3	0	3	1	$0	--	--

Chemical Name	2016	2015	2014	2013	2012	2011	2010	2009	2008
ETHYLENE OXIDE	15,100	16,100	15,185	15,754	15,000	5,300	5,100	4,200	4,600

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds				4,134.00			4,246.68			14,278.26	
TRI	Ethylene oxide	Pounds		3,800.00	4,600.00	4,200.00	5,100.00	5,300.00	15,000.00	15,754.00	15,185.00	16,100.00	15,100.00

Shell Technology

Facility Site | Release Points | Emissions Units | Processes

Facility Information

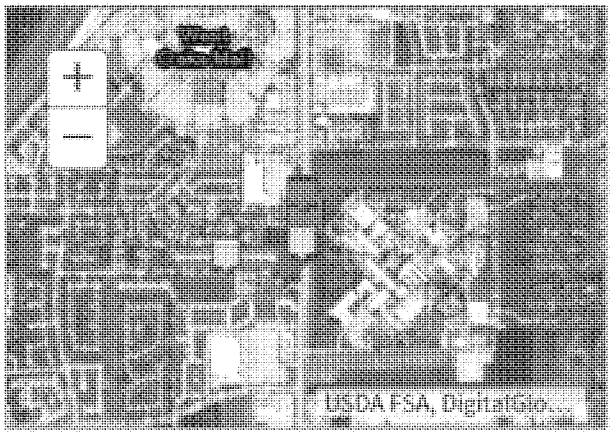
2014 Emissions View

EIS Facility ID:	3736811
Agency Identifier:	307 (TXCEQ)
State and County FIPS:	48201 (Harris, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	SHELL TECHNOLOGY CENTER HOUSTON
Facility Description:	3333 HWY 6 SOUTH
Company Name:	SHELL CHEMICAL LP
NAICS:	325110 - Petrochemical Manufacturing
Facility Source Type:	Chemical Plant
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1980
Physical Address:	3333 HWY 6 SOUTH
Supplemental Address:	
Locality:	HOUSTON
State:	Texas
Zip Code:	77082
Address Comment:	
EIS Comment:	
HAP Facility Category:	
Permit Status:	
Permit Status Year:	
Last updated from:	Jonathan Miller
Last updated by agency:	EIS
Last updated on:	2017-01-14 10:32 PM

NEI	Ethylene oxide	Pounds		1,307.20	1,159.20	918.60

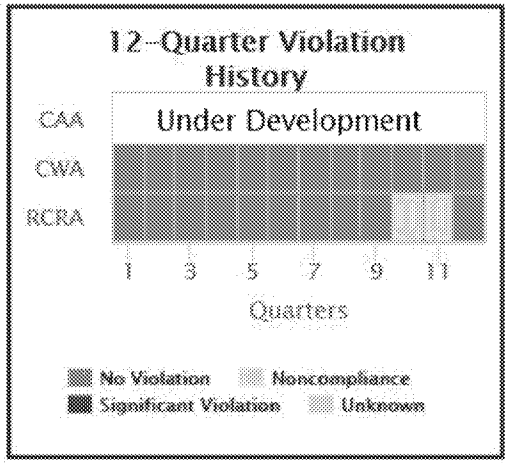
Pollutant Name	UOM	2014 NEI Draft V1	2014 NEI Draft V2	2014 NEI Final V1	2014 Responsible Agency Data	2014EPA_GHG	2014EPA_HAP Aug_PMaug	2014EPA_HAPAug	2014EPA_PM Aug	2014EPA_PMspecies	Texas Commission on Environmental Quality
Ethylene Oxide	LB	918.6000	918.6000	918.6000	918.6000	-	-	-	-	-	918.6000

Facility Summary



WESTHOLLOW TECHNOLOGY CENTER
3333 HWY. 6 S., HOUSTON, TX 77082

FRS ID: 110000599291
EPA Region: 06
Latitude: 29.72644
Longitude: -95.64394
Locational Data Source: TRIS
Industry: Chemical Manufacturing; Professional, Scientific, and Technical Services
Indian Country: N

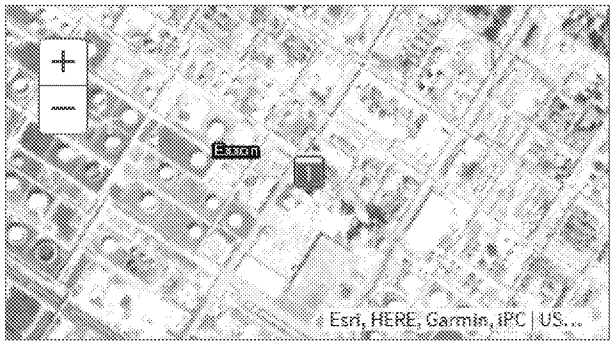


Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs in NC (of 12)	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CAA	2	12/09/2014		0	0	--	--	--	1	$36,000
CWA	--	02/17/2000	No Violation	0	0	--	--	--	--	--
RCRA	1	12/08/2016	No Violation	2	0	1	--	--	--	--

Program	Pollutant	Units	Trend	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
NEI	Ethylene oxide	Pounds			1,307.20				1,159.20			918.60	

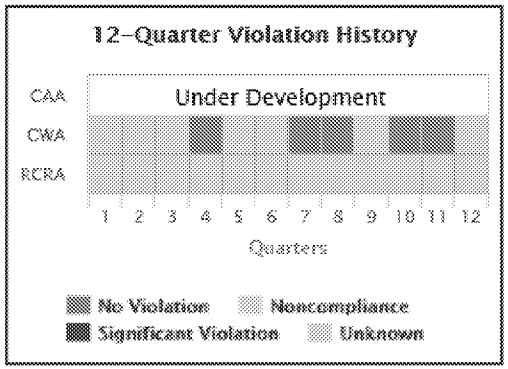
Facility Summary



EXXONMOBIL REFINING & SUPPLY BAYTOWN REFINERY (PART)

2800 DECKER DR, BAYTOWN, TX 77520

FRS ID: 110000502901
EPA Region: 06
Latitude: 29.739444
Longitude: -95.006944
Locational Data Source: EIS
Industry: Petroleum and Coal Products Manufacturing; Pipeline Transportation
Indian Country: N



Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs in NC (of 12)	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CAA	5	08/30/2012	Significant Violation	12	12	--	--	--	--	--
CWA	3	10/13/2016	Noncompliance	7	0	--	--	--	--	--
RCRA	4	12/02/2015	Noncompliance	12	0	3	2	$20,000	--	--

Facility Site | Release Points | Emissions Units | Processes

Facility Information

-- Emissions Year -- View

EIS Facility ID:	4924411
Agency Identifier:	27 (TXCEQ)
State and County FIPS:	48201 (Harris, Texas)
Tribal Code:	
State and Country FIPS:	
Responsible Agency:	Texas Commission on Environmental Quality
Facility Name:	BAYTOWN REFINERY
Facility Description:	2800 DECKER DR
Company Name:	EXXONMOBIL REFINING & SUPPLY CO
NAICS:	324110 - Petroleum Refineries
Facility Source Type:	Petroleum Refinery
Facility Category:	HAP Major
Operating Status:	Operating
Operating Status Year:	1979
Physical Address:	2800 DECKER DR
Supplemental Address:	
Locality:	BAYTOWN
State:	Texas
Zip Code:	77520
Address Comment:	
EIS Comment:	
HAP Facility Category:	
Permit Status:	
Permit Status Year:	
Last updated from:	Jonathan Miller
Last updated by agency:	EIS
Last updated on:	2017-02-10 02:56 PM

Pollutant Name	UOM	2010 NEI Draft V1	2010 NEI Draft V2	2013 NEI Final V1	2014 Responsible Agency Data	2014EPA_Cr_Aug	2014EPA_HAPAug	2014EPA_PM-Aug	2014EPA_PMspecies	2014EPA_TRI	Texas Commission on Environmental Quality

Message

From: Lavoie, Tegan [lavoie.tegan@epa.gov]
Sent: 6/28/2017 8:27:26 PM
To: Morris, Mark [Morris.Mark@epa.gov]; Godfrey, Janice [Godfrey.Janice@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: RE: Chem sector RTR modeling
Attachments: Facility List for NATA Run No. 3 - new EIS only.xlsx; Facility List for NATA Run - All EIS From List.xlsx

Hi Mark,

Attached, please find EIS IDs for the third (and final) batch. If you could run all the batches on the same run with the new EO values, that would be great. I wasn't sure if you needed just the new EIS IDs, or a list of all EIS IDs from this new run + the previous two runs, so I've attached both options here. The labels should be self-explanatory.

Let me know if you have any questions and thanks again for your help!

Facility List for NATA Run No. 3 ... Facility List for NATA Run - All E...

Best,
Tegan

From: Morris, Mark
Sent: Wednesday, June 28, 2017 1:00 PM
To: Godfrey, Janice <Godfrey.Janice@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>
Subject: RE: Chem sector RTR modeling

OK. When the third batch is ready just let us know, and let us know if you want results just for batch 3 or you want to redo all of them to get them all on the same run date (that is, so all results reflect the ethylene oxide change, for example).

Thanks

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

-----Original Appointment-----
From: Godfrey, Janice

Sent: Wednesday, June 28, 2017 12:57 PM
To: Smith, Darcie; Morris, Mark; Lavoie, Tegan
Subject: Chem sector RTR modeling
When: Wednesday, June 28, 2017 1:00 PM-2:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where:

You guys don't need to come to meeting today if you don't want to. The only thing Tegan was going to pass along is that we are going to have a third batch of facilities to run for risk. Thanks.

2014 NATA Modeling Update – January 2017

In September 2016 EPA released preliminary 2014 NATA point source data for our EPA regional office and State/local and tribal (S/L/T) partners to review. More information on this review can be found on the 2014 NATA SharePoint Point Source Risk Review site at:

[HYPERLINK "https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/2014Facility/SitePages/Home.aspx"]

In December 2016 EPA remodeled the point source data using an updated modeling approach (i.e., receptors, meteorology) as well as updated health benchmark data. This resulted in approximately 350 additional facilities now being classified as having a potential for elevated risk (those with cancer risk greater than 10-in-1 million or HI greater than 2). Changes in risk levels at many of these facilities are the result of an updated cancer health benchmark for Ethylene Oxide (EtO) which was released by EPA in December 2016 (https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025). Cancer risk levels for this pollutant are approximately 50 times higher than those projected in the September 2016 point source risk estimates. Many of these EtO sources are associated with sterilizing operations in the health care industry sector.

We are asking our EPA regional office and S/L/T partners to review the additional potential elevated risk facilities and process along with those identified in the September 2016 point source model runs. To further aid in this review we are providing the following additional documents on the SharePoint site (provided above):

- NATA 2014 Point max risk and hi Comparison File Summary.xlsx
  - This file lists both the September 2016 and December 2016 MIR and HI for each facility included in the 2014 NATA analysis.
- View3_additional_Jan2017.xlsx
  - Detailed Sub Facility Data (View 3) for additional potential elevated risk facilities. This file contains the information for just the 350 additional facilities nationwide.
- ChgProcess_additional_Jan2017.xlsx and ChgRelPt_additional_Jan2017.xlsx
  - Change sheets to submit updates for additional potential elevated risk facilities. This file contains the information for all 350 additional facilities nationwide.
- Checklist.xlsx
  - Revised checklist (additional facilities exceeding 100-in-1 million or HI of 5) are in the "ADDED" tab.

Please direct any additional questions or comments to Madeleine Strum ([HYPERLINK "mailto:strum.madeleine@epa.gov"]) or Ted Palma ([HYPERLINK "palma.ted@epa.gov"])

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 8/10/2018 1:46:22 AM
To: Houyoux, Marc [Houyoux.Marc@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]
CC: Thurman, James [Thurman.James@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]
Subject: final facility emissions checking status
Attachments: listof100.xlsx

All
Attached is a file of facilities that I checked for emissions review history (who reviewed, what they found). Other than TRI and SPPD, I don't have a record that indicates that the facility verified the emissions. For facilities in which states verified the emissions, the states did not provide information on how this was done.

Ex. 5 Deliberative Process (DP)

Please call me (tomorrow) or email me (next week) if you have questions.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Message

From: Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]
Sent: 8/14/2018 4:53:27 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]
Subject: FW: BCP response for EtO

From: Parker, Cindy
Sent: Tuesday, August 14, 2018 9:58 AM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>
Cc: Madden, Joshua <madden.joshua@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>
Subject: FW: BCP response for EtO

BCP.

From: Ahuja, Anupa
Sent: Tuesday, May 01, 2018 8:47 AM
To: Parker, Cindy <parker.cindy@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: BCP response for EtO

Hi Cindy,
Below is BCP's response. Would you please send it to all of the appropriate people? Since there are no changes the state's data does not need to be updated.

Thanks.

From: Tod Viso [mailto:TViso@BALCHEM.COM]
Sent: Tuesday, May 01, 2018 8:39 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Subject: 2014 TRI data review

Ahuja,

Good talking with you this morning. Per our discussion, I have reviewed the 2014 data and see no further changes needed. In 2014, the calculation was updated for the number of connectors and this update was submitted when filing that data in 2015. Let me know if you need anything else.

Thanks,

Tod Viso
Plant Manager | BCP Ingredients, Inc.
3830 Highway 30 | St. Gabriel, LA 70776
[P] 225-255-4889 x2302 [C] 225-236-7205
www.Balchem.com

Message

From: Stone, William [stone.william@epa.gov]
Sent: 8/15/2018 1:59:21 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]
CC: Doolan, Stephanie [Doolan.Stephanie@epa.gov]; Johnson, Karen T. [Johnson.Karent@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: 2014 NATA version 2 - DRAFT ethylene oxide point source risks
Attachments: Copy of ForRegions_EtOReview_V2NATA_031518 (003).xlsx

Darcie: I was asked by my manager to follow up on a facility with ethylene oxide emissions that we did not contact in March. Van Diest Supply Company in Webster City, Iowa revised their emissions of ethylene oxide in May. They actually revised several years of inventory and submitted them to the state at that time.

In V1 and V2 of NATA the emissions for this facility were 1.27 tons for 2014.
The 2014 revised facility total for ethylene oxide is 0.000336 tons.

I am not sure if this is all too late to be useful, but I was asked to check with this facility on Monday afternoon.

If you have any questions, please let me know.

Will Stone

U.S. EPA Region 7
Air Planning and Development Branch
Atmospheric Programs Section
11201 Renner Blvd
Lenexa, KS 66219
913-551-7714

From: Stone, William
Sent: Thursday, March 29, 2018 4:00 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Doolan, Stephanie <Doolan.Stephanie@epa.gov>
Subject: RE: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Darcie,

Stephanie Doolan and I called the 2 facilities that were listed for region 7 to contact. The main focus of the calls ended up beigng to explain the NATA process is to the facility contacts. We do not have anything extraordinary to report, but I did add comments to the spreadsheet in column R in the text of this email if you prefer.

Penford: Emissions are correct. Stack height is actually 49 feet rather 40 feet in EIS. Source is considering doing a new stack test.

BCP: Source indicated emissions are all fugitive. May have revise emissions estimate, SD gave 30 days. Asked about IRIS numbers and SD offered to email link.

Please let me know if you have follow up questions.

Will Stone

U.S. EPA Region 7
Air Planning and Development Branch
Atmospheric Programs Section
11201 Renner Blvd
Lenexa, KS 66219
913-551-7714

From: Smith, Darcie
Sent: Thursday, March 15, 2018 6:03 PM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>; Bellizzi, Carol <Bellizzi.Carol@epa.gov>; Bollweg, George <bollweg.george@epa.gov>; Cain, Alexis <cain.alexis@epa.gov>; Casso, Ruben <Casso.Ruben@epa.gov>; Davidson, Ken <Davidson.Ken@epa.gov>; Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Glass, Geoffrey <GLASS.GEOFFREY@EPA.GOV>; Gross-Davis, CarolAnn <Gross-Davis.CarolAnn@epa.gov>; Jackson, Scott <Jackson.Scott@epa.gov>; Kierys, Dawid <kierys.dawid@epa.gov>; Lancey, Susan <lancey.susan@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>; Louis, Egide <Louis.Egide@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; McCrowey, Clinton <mccrowey.clinton@epa.gov>; Olson, Kyle <Olson.Kyle@epa.gov>; Owens, Katharine <Owens.Katharine@epa.gov>; Parker, Cindy <parker.cindy@epa.gov>; Sieffert, Margaret <Sieffert.Margaret@epa.gov>; Stone, William <stone.william@epa.gov>; Twickler, Donna <twickler.donna@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Chow, Alice <chow.alice@epa.gov>; Brown, Steven <Brown.Steven@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>; Wroble, Julie <Wroble.Julie@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Narvaez, Madonna <Narvaez.Madonna@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>; Merrill, Raymond <Merrill.Raymond@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Shelow, David <Shelow.David@epa.gov>; Vasu, Amy <Vasu.Amy@epa.gov>; Berner, Ted <Berner.Ted@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>
Subject: 2014 NATA version 2 - DRAFT ethylene oxide point source risks

Hello –

You are receiving this email because you are a member of the ATRA EtO group or a NATA Regional Office lead or both. Either way, you know that in version 1 of the 2014 NATA we saw ethylene oxide emissions from point sources driving risks at the census tract level. Since that time, you have reviewed the data, worked with your states to review the data, and provided revisions back to us. We have incorporated those changes from V1 of the 2014 NATA and in preparation for version 2, have re-modeled the EtO-emitting point sources first. This is your first look at those results. **Please remember that risk results are not to be shared outside the Agency**.

The attached pdf document provides: 1) a summary of the events of the emissions review, 2) a regional count of facilities in the attached spreadsheet, and 3) an explanation of the data fields in the attached spreadsheet file. The attached spreadsheet contains a list of facilities that had a census *block* level cancer risk greater than 100-in-1 million in either version 1 (column J) or version 2 (column K). These are all provided so you can see how any data changes impacted the risk results. As you will see, there are still some facilities where we have estimated a census *tract* level cancer risk of greater than 100-in-1 million in version 2. These are indicated with a "Y" in column K. (An exact risk number is not provided because the estimates only take into account the AERMOD modeling; CMAQ is not yet complete so we have not combined the two results and we have given you our best estimate.)

We know that some of you are actively working with your states on the data review. Thank you for your time and effort doing that! There are some columns in the spreadsheet that may help focus your conversations, for example, column N, which provides information on how the EtO emissions were calculated for the process with the most emissions. And, our engineers are also working through their contacts to continue to verify the emissions and other inputs to the modeling. (If you need to contact them, Jennifer (chemical manufacturing) and Jonathan (sterilizers) are in the "CC" field.) There are columns in the spreadsheet to indicate what has been done and what type of changes have been received or are expected. **However, without additional information, there will likely be little change to these results.** If you have received additional info or revisions, please work with Madeleine to get those to us.

As you continue to work through this situation, please let us know if there's anything we can do to help or if there's additional data you need. We are happy to walk through this on the next ATRA call or set up a special purpose call. As always, if you have questions please feel free to contact me, Ted (palma.ted@epa.gov, 919-541-5470), or Madeleine (strum.madeleine@epa.gov, 919-541-2383).

Thank you,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Sieffert, Margaret [Sieffert.Margaret@epa.gov]
Sent: 10/10/2017 2:04:42 PM
To: Lavoie, Tegan [lavoie.tegan@epa.gov]
Subject: 3M New Elm information
Attachments: RE: 2014 ATEI - 2701500039

Chun Yi forwarded her communications she had with the facility. There is a bit of modeling information provided but also note that the facility shut down the EtO unit as of August 2017. Let me know if you need additional information and we can work with Chun Yi to see if we can obtain it.

-Margaret

Message

From: Chun Yi Wu [chun.yi.wu@state.mn.us]
Sent: 8/7/2017 4:48:36 PM
To: Cheryl Emery [cbemery@mmm.com]
Subject: RE: 2014 ATEI - 2701500039

Thanks for the update. Good to hear.

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Monday, August 07, 2017 11:20 AM
To: Wu, Chun Yi (MPCA)
Subject: RE: 2014 ATEI - 2701500039

Hi Chun Yi,
We have a few more units to produce so production should be done this month – August 2017.
Please let me know if you have any additional questions.
Thanks,
Cheryl

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From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Monday, August 07, 2017 11:09 AM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

Could you confirm the 3M already shut down the EtO operation in June 2017? Thanks.

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Friday, February 10, 2017 2:20 PM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Chun Yi,

This looks good. I am happy to help and thanks for the summary.
Take care,
Cheryl

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3M.com

From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Friday, February 10, 2017 2:13 PM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

It was very nice to talk with you. I will use the following to summarize our effort on the review of 2014 emissions for ethylene oxide from the 3M - New Ulm - Electrical Products Division:

1. The originally reported emissions of EtO, 0.09 Tons, are right.
2. The emissions originally were reported for SCC 30800699. It should be for SCC 31502001.
3. The release of emissions was through 4 each ¾" copper lines housed within a 4.75"pipe running through the roof of the building, ~10 foot high. The exhaust velocity would be close to 0 due to the elbow in the release point (goose neck). The exhaust temperature is 131F.
4. 3M will shut down the operation in June 2017.

Please let me know if I missed anything. I really appreciate your help.

Chun Yi Wu, Ph.D., P.E.
Principal Engineer
Minnesota Pollution Control Agency
Environmental Analysis & Outcomes Division
520 Lafayette Road North
St. Paul, MN 55155
Phone: 651-757-2833
Fax: 651-297-7709
Email: chun.yi.wu@state.mn.us

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Friday, February 10, 2017 12:04 PM

To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Hi Chun Yi,
Sorry for my delay but I just got out of all the meetings that I had this morning. I can make 1:30pm work this afternoon. I will call you at 651-757-2833

Thanks,
Cheryl

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3M.com

From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Friday, February 10, 2017 7:33 AM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

I got your voice message. It is better for us to discuss via phone. May I call you at 1:30 PM this afternoon?

I want to find out the release characteristics for EtO. Hope the findings could reduce the health risks caused by the EtO emissions. Thanks.

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Friday, February 10, 2017 6:56 AM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Chun Yi,
I am sorry for the confusion. I added in the exhaust #5 which is the EtO cabinet that we store the small canisters of EtO which we also exhaust.

During testing, they hook up the ¾" cooper line to the exhaust. Each one of them exhaust to the roof.

The EtO cabinet that is also exhausted (Exhaust fan #5), has a 3" vent that goes into a different stack (#8). Theoretically, there should not be any EtO in the cabinet but we exhaust as a precaution.

I just left you a voice mail. I am in meetings all morning and won't be available until 1pm.
Please let me know if you still want to talk more about this.
Thanks,
Cheryl

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From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Thursday, February 09, 2017 2:52 PM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

Sorry, I am little confused. You mentioned the 4 each ¾" copper lines running through the roof of the building. I just want to know the exhaust air flowrate for those 4 lines that emit ethylene oxide.

Are all these 4 each ¾" copper lines in the image you e-mailed to me?

Please call me when you have time. My phone number is 651-757-2833. Thanks.

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Thursday, February 09, 2017 2:42 PM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Sorry about that Chun Yi.

This is what we have for the airflow for our exhaust fans:
Exhaust fan #1: 1600 fpm
Exhaust fan #2: 1550 fpm
Exhaust fan #3: 1674 fpm
Exhaust fan #4: 1680 fpm
Exhaust fan #5: 1895 fpm (ETO Cabinet)

Please let me know if you need anything else.
Thanks,

Cheryl

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From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Wednesday, February 08, 2017 4:21 PM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

The exhaust air flow rate needs to be in cubic feet per minute or cubic feet per second. Psi is a unit for pressure, not air flowrate. Thanks.

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Wednesday, February 08, 2017 12:33 PM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Hi Chun Yi,
Here are the answers to your questions:
What is the exhaust temperature? 55 degrees C
What is the air flowrate for each line? 60 psi

Please let me know if you have any further questions.
Thanks,
Cheryl

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Scotch Post-it Scotch-Brite Filtrete Command Nexcare Blue

From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Wednesday, February 08, 2017 8:11 AM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

Thanks for the detailed information to illustrate the ventilation. I see the insolation outside of the copper lines. What is the exhaust temperature? What is the air flowrate for each line?

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Tuesday, February 07, 2017 3:47 PM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: FW: 2014 ATEI - 2701500039

Hi Chun Yi,
This is information I have regarding the stack parameters and number of stacks:
There are 4 each ¾" copper lines running through the roof of the building

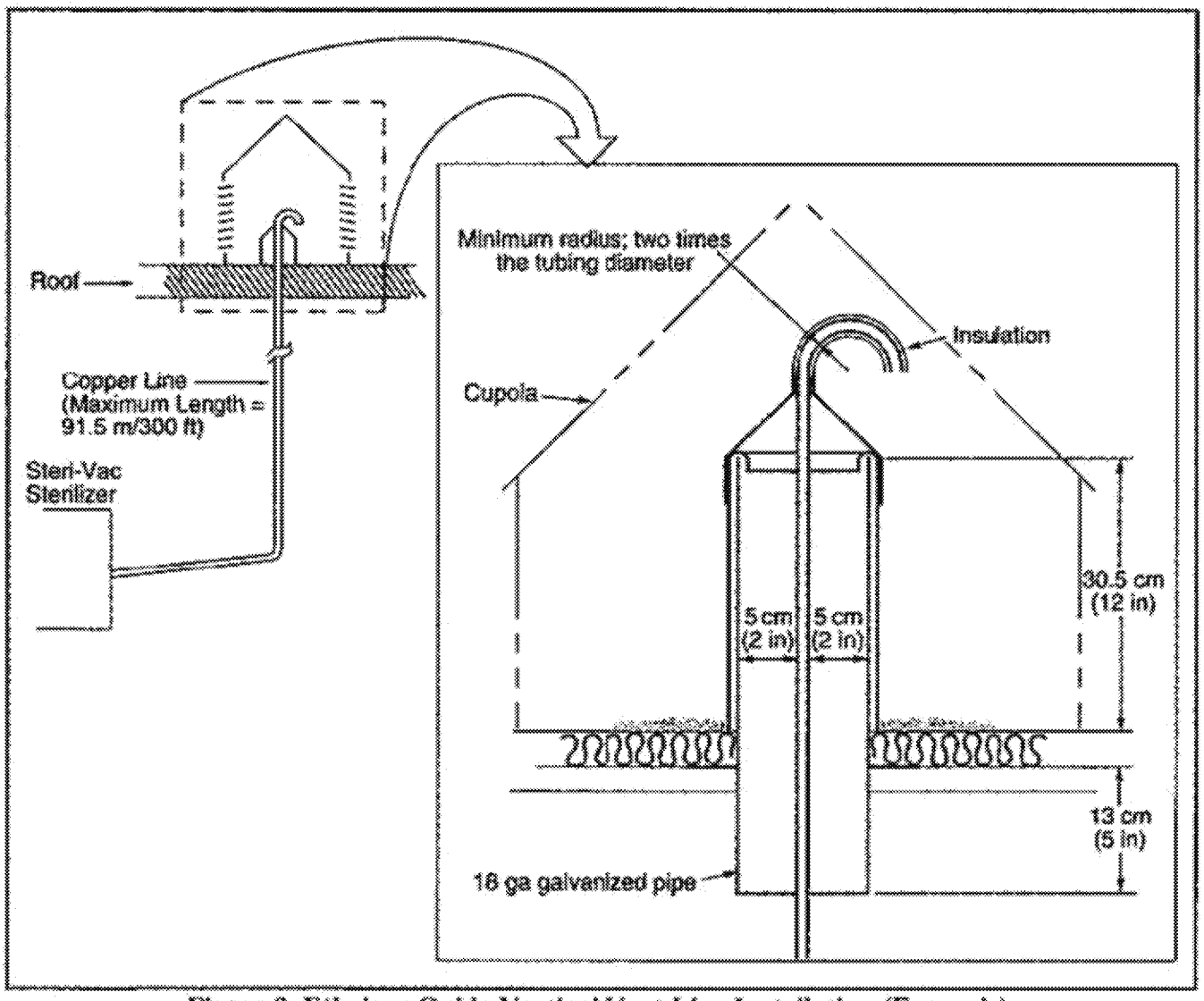

Figure 9. Ethylene Oxide Vertical Vent Line Installation (Example).

The picture shows the vent stack on the roof which is ~10 foot high.

Please let me know if you need any additional information.
Thanks,
Cheryl

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From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Thursday, February 02, 2017 3:38 PM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

Thanks a lot for your review. I will not change the emission value but the SCC. Do you have any idea regarding the stack parameters for the process? How many stacks do you have for the process? We have default values as follows:

Type	Description	Stack Height (FT)	Stack Diameter (FT)	Exit Gas Flow Rate (ACFM)	Exit Gas Temperature (°F)
Vertical	Imitation stack (default for SCC '30800699')	33.3	1.7	3254.88	173.8
Vertical	Imitation stack (default for SCC '31502001')	40.77	1.224	1055.34	99.876

Originally, we used one imitation stack for SCC30800699. If you don't have any data, we will use one stack for SCC31502001.

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Thursday, February 02, 2017 2:46 PM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Hi Chun Yi,

I have double-checked and the reported value of 0.09 tons of EtO emissions for 2014 is correct. The emissions are coming from a process that aligns with SCC code 31502001 (Industrial Processes | Photographic Equipment/Health Care/Laboratories | Health Care - Hospitals | Sterilization with Ethylene Oxide).

Please let me know if you have any further questions.

Best Regards,
Cheryl

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From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Friday, January 27, 2017 9:20 AM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] RE: 2014 ATEI - 2701500039

Cheryl,

Thanks for the quick response. One week is fine with me.

Chun Yi

From: Cheryl Emery [mailto:cbemery@mmm.com]
Sent: Friday, January 27, 2017 9:18 AM
To: Wu, Chun Yi (MPCA) <chun.yi.wu@state.mn.us>
Subject: RE: 2014 ATEI - 2701500039

Hi Chun,
Yes, I will double check the reported EtO emissions in 2014. I will get back to you in approximately a week. Will this be ok?
Best Regards,
Cheryl

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From: Wu, Chun Yi (MPCA) [mailto:chun.yi.wu@state.mn.us]
Sent: Friday, January 27, 2017 9:15 AM
To: Cheryl Emery <cbemery@mmm.com>
Subject: [EXTERNAL] 2014 ATEI - 2701500039

Cheryl,

Although we are working on the 2016 EI now, EPA is using the 2014 AT emissions for the national air toxics assessment (NATA). EPA released an updated cancer health benchmark for Ethylene Oxide (EtO) in December 2016 (https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1025).It was noticed that you reported 0.09 Tons of EtO emissions for Rubber and Miscellaneous Plastics Products, Other Fabricated Plastics (SCC 30800699). The emissions resulted in high health risks. Could you check and make sure the reported value is right? Thanks.

Chun Yi Wu, Ph.D., P.E.

Principal Engineer
Minnesota Pollution Control Agency
Environmental Analysis & Outcomes Division
520 Lafayette Road North
St. Paul, MN 55155
Phone: 651-757-2833
Fax: 651-297-7709
Email: chun.yi.wu@state.mn.us

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Message

From: Ahuja, Anupa [ahuja.anupa@epa.gov]
Sent: 7/24/2018 3:00:16 PM
To: Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]
CC: Smith, Darcie [Smith.Darcie@epa.gov]
Subject: increase in EtO emissions of 17 tons

Hi, I wasn't sure who I should send this to so I included you both.

On the R6 ppt slides for today's call, I noticed that for the Port Neches, tx plant the review column says "no changes" and under review it says "TCEQ - no changes". For the Santa Teresa NM plant, the review column says "emissions decreased."

I have reviewed the TRI data for both plants and:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Anupa

From: Caparoso, Jennifer
Sent: Tuesday, July 24, 2018 6:25 AM
To: Ahuja, Anupa
Cc: Smith, Darcie
Subject: RE: Emissions data

Hi Anupa,

While not reflected in NATA, we received additional information from the Union Carbide St. Charles Facility that we are still evaluating and discussing with the facility. When we complete our analysis, if there are any changes, we will share them with you. We have not received any other emissions changes.

Jennifer Caparoso, P.E.
CDR, USPHS
Refining and Chemicals Group
SPPD/OAQPS
U.S. Environmental Protection Agency
Mail Code: E143-01
Research Triangle Park, NC 27711
(919) 541-4063

From: Ahuja, Anupa
Sent: Thursday, July 19, 2018 11:10 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Ok thanks Darcie.

From: Smith, Darcie
Sent: Thursday, July 19, 2018 10:10 AM
To: Ahuja, Anupa <ahuja.anupa@epa.gov>
Cc: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: RE: Emissions data

Hi Anupa -

Thanks for your question. You're right, we have spoken with our AA, but the conversation is not yet over.

Regarding the emissions, as I shared with you previously, there are no new emissions, with the exception of a minor one (20 lbs out of 7 tons) for Texas Operations in Longview TX and possibly some updated emissions from Union Carbide St. Charles. We've been expecting some, so I've copied Jennifer Caparoso on this because if we have received new emissions for that facility, she will have them.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Ahuja, Anupa
Sent: Wednesday, July 18, 2018 11:32 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Emissions data

Hi Darcie,
Now that the Wehrum briefing is done, my management is asking if it would be possible for us to get the updated emissions data for the 9 facilities in R6? We have the 2014 emissions inventory data, but we would like to get the updates to the emissions that may have been provided by the companies.

Thank you,
Anupa

Message

From: Koerber, Mike [Koerber.Mike@epa.gov]
Sent: 8/9/2018 8:21:44 PM
To: Jay, Michael [Jay.Michael@epa.gov]
CC: Smith, Mark A. [Smith.Marka@epa.gov]; Smith, John [Smith.John@epa.gov]; Werner, Leslye [Werner.Leslye@epa.gov]; Doolan, Stephanie [Doolan.Stephanie@epa.gov]; Algoe-Eakin, Amy [Algoe-Eakin.Amy@epa.gov]; Stone, William [stone.william@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: Re: R7 Agreement with latest Et0 list

Thanks, Mike

Sent from my iPhone

On Aug 9, 2018, at 3:25 PM, Jay, Michael <Jay.Michael@epa.gov> wrote:

Mike,

R7 agrees with current listing of our 4 sources on the list as candidates for further consideration on next steps. I am sending this on behalf of Mark Smith our acting Division Director and John Smith, our Deputy Director who are both out of office and will return next week.

Region 7 Interactions with EtO facilities

- Region 7 has reported during NATA national workgroup calls on our actions to contact, verify, and/or inspect three of the four facilities on the ADD list as follows:
  - Penford Products,
  - BCP Verona
  - Midwest Sterilization
- R7 staff did not contact the fourth facility, Van Diest, in Webster City, Iowa, because the v. 2 modeling tract-level risk was significantly less than that of the other three facilities discussed above (16 in-one-million). In addition, it was not on the original list of facilities OAQPS requested us to contact.
- R7 contacted Penford Products on 3-28-18 and BCP Verona on 3-29-18, and BCP Verona contacted us again later on 4-29-18. We verified that the reported emissions of EtO for both facilities are accurate and informed them of the Census Tract level risk due to EtO. We discussed the potential for voluntary emissions reductions. The facilities were interested, but didn't make any commitments.
- R7 staff conducted an air compliance inspection at the largest facility, Midwest Sterilization on 5-22-18. The facility was found in compliance with its minor source air permit. We had post-inspection calls with the facility on 7-13-18 and 7-24-18. Prior to our visit, we considered suggesting the Region 5 approach of routing the sterilizer back vent emissions to the existing scrubber, but at the inspection, we found that the facility had considered that route. The facility had conducted testing in 2005 which showed emissions of less than 0.08 pounds of EtO per pound of EtO charged. That testing continues to date using a gas chromatograph. The inspection results verified the reported emissions for this facility.

Mike Jay

Branch Chief
Air Planning and Development Branch

USEPA R7
913-551-7460

Message

From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 8/14/2018 8:00:07 PM
To: Palma, Ted [Palma.Ted@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: EtO facilities in elevated risk tracts
Attachments: facs in high risk tracts with EtO emissions.xlsx

Here are the facilities that have EtO emissions in the 106 tracts nationwide with total risk >= 100 in a million. The list does not include facilities that may be just outside a high risk tract and potentially drive the risk of that tract. I have joined all the tract risk data to the list of facilities for the tract it is in.
This was all done by the map app, but don't try this at home.

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

Message

From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 8/15/2018 1:01:43 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: EtO facilities in elevated risk tracts
Attachments: EtO Facs in High and Adj Tracts.xlsx

Here's another list, done the same way as before, but now also grabbing facilities in or adjacent to the 100 in a million (total risk) tracts. This list includes the MSA ones you noted below.
I'm sure the facilities you noted that are in the attached list but not on the MSA list are just those with low emissions that don't really drive anything, but still get included because they are in the tracts and they have nonzero emissions...

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

From: Smith, Darcie
Sent: Tuesday, August 14, 2018 6:38 PM
To: Morris, Mark <Morris.Mark@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EtO facilities in elevated risk tracts

No worries – I certainly won't try this at home.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

In the MSA/facility table there are 6 facilities that are not included in your file. They are listed here:

ID	Facility	Address	City	State	Region	NATA tract	NATA block
588911	CRODA INC.	315 CHERRY LANE	NEW CASTLE	Delaware	03	100	153
3699811	Griffith Micro Science Inc	2973 Olympic Industrial Dr.	Smyrna	Georgia	04	200	221
4173711	Medtronic, Inc., Sterile Systems Operation	520 Watson SW	GRAND RAPIDS	Michigan	05	100	273
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	2201 Old Spanish Trail	Westlake	Louisiana	06	100	841
3736811	SHELL TECHNOLOGY CENTER HOUSTON	3333 HWY 6 SOUTH	HOUSTON	Texas	06	300	291
3965211	SOLVAY USA INC	2151 KING ST EXT	CHARLESTON	South Carolina	04	100	240

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Morris, Mark
Sent: Tuesday, August 14, 2018 4:00 PM
To: Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: EtO facilities in elevated risk tracts

Here are the facilities that have EtO emissions in the 106 tracts nationwide with total risk >= 100 in a million. The list does not include facilities that may be just outside a high risk tract and potentially drive the risk of that tract. I have joined all the tract risk data to the list of facilities for the tract it is in.
This was all done by the map app, but don't try this at home.

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

Message

From: Lavoie, Tegan [lavoie.tegan@epa.gov]
Sent: 4/11/2018 7:20:06 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]; Witt, Jon [Witt.Jon@epa.gov]
CC: Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: EtO info update

Hi Darcie,

My response has two parts:

1. For a record of all contacts we have made for each RCG facility, please refer to the "MASTER_ETOX_v1_v2_highrisk_comparison" spreadsheet on the SharePoint site. See the "Contacts" column for notes on who was contacted and if a response was received.
2. Here, I have elaborated on the responses received thus far from 11 total facilities, some with changes to EO, some with changes to release parameters, and some with no changes. All facilities that received changes are MON facilities, so you should be able to pull all updates from the MON modeling file:

Facility ID	Facility Name	State	City	Region	MACT	Response
5383511	VAN DIEST SUPPLY COMPANY	Iowa	WEBSTER CITY	7	MON	Contact provided updated EO emissions and release parameters. See MON modeling file for changes made.
8467311	The Dow Chemical Co - Louisiana Operations	Louisiana	Plaquemine	6	MON, OLD, HON, Ethylene	Received missing EO emissions and updated release parameters (velocities, heights) using 2016 emissions data they provided. See MON modeling file for updates, which include 2016 EO emissions. They also provided 2014 emissions if you prefer these numbers, let me know if you would like me to send.
7281511	BCP INGREDIENTS-VERONA PLANT	Missouri	VERONA	7	(not HON, MON, OLD, MCM, or Ethylene)	Facility said all emissions are fugitives. May revise emissions - deadline end of April. R7 emailing IRIS link to facility.
3965211	SOLVAY USA INC	South Carolina	CHARLESTON	4	MON, OLD	SC DEHC reviewed information and did not make changes. Planning site visit on April 25th and will follow up.

4941511	TEXAS OPERATIONS	Texas	LONGVIEW	6	MON, OLD, HON, Ethylene	Contact did not provide any changes to EO emissions, do not know if we will receive any.
5782311	UNION CARBIDE CORP -SO CHARLESTON FAC.	West Virginia	SOUTH CHARLESTON	3	MON, OLD, HON, PPP	Provided release parameter updates but no changes to EO emissions.
5504811	Taminco US Inc	Louisiana	St. Gabriel	6	(not HON, MON, OLD, MCM, or Ethylene)	Corporate environmental contact only responded to state that this facility is a minor source of HAP and not subject to MON or OLD. Did not provide updates to EO.
6884411	UNION CARBIDE CORPORATION-INSTITUTE	West Virginia	INSTITUTE	3	MON, HON	Appear to have provided changes to release point parameters only for EO units, but not to EO emissions. Refer to MON modeling file to obtain changes.
7202911	Union Carbide Corp - St Charles Operations	Louisiana	Taft	6	MON, OLD, HON, Ethylene, PPP	Provided changes to EO emissions. Zeroed out two records with rationale provided, also added 10 records of missing EO emissions to the file. Refer to MON modeling file to obtain changes.
8465611	BASF Corp - Geismar Site	Louisiana	Geismar	6	MON, OLD, HON	Provided changes to EO emissions. Reduced EO emissions from CO2 removal system from 5.3522 tpy to 4.28 tpy, with rationale for change included. Refer to MON modeling file to obtain changes.
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	Louisiana	Westlake	6	MON, HON, Ethylene	Contact reviewed EO emissions and has no changes.

Please let me know if you have any questions.

Best,
Tegan

Tegan N. Lavoie, PhD | Physical Scientist
OAR/OAQPS/SPPD/Refining and Chemicals Group
U.S. Environmental Protection Agency
109 TW Alexander Drive, Office: E130A, MC:E143-01

Research Triangle Park, NC 27711
Phone: (919) 541-5110 | Email: lavoie.tegan@epa.gov

From: Smith, Darcie
Sent: Wednesday, April 11, 2018 10:27 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EtO info update

Thanks Madeleine. That's good to know.

Jennifer/Tegan and Jonathan – have your conversations with the trade associations been fruitful?

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Strum, Madeleine
Sent: Tuesday, April 10, 2018 7:02 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EtO info update

Hi All
On my end, Ron Ryan provided me Jennifer's lat/lon changes and none of them affected the high priority ethylene oxide facilities.
Region 2 provided me Edwards Life Science facility (Puerto Rico) release parameter changes which had a negligible impact on the concentrations at the MIR receptor.

I don't believe I've seen any other post v2 NEI corrections. Please let me know if I might have missed something.

Madeleine
Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Smith, Darcie
Sent: Monday, April 9, 2018 1:42 PM
To: Caparoso, Jennifer <Caparoso.Jennifer@epa.gov>; Witt, Jon <Witt.Jon@epa.gov>; Lavoie, Tegan <lavoie.tegan@epa.gov>
Cc: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: EtO info update

Hi –

Erika mentioned that NCEA/ORD and Region 6 are going to be meeting in the next couple weeks to talk about ethylene oxide. In preparation for that, she asked for an update on the status of activities related to ethylene oxide. For example, how many facilities have responded to your inquiries by providing revised data? What are the latest conversations you've had with the trade associations? I don't have a specific request of you today, but please be prepared and know that a request along these lines is coming soon. It is possible that we'll need to put together an updated status pager, or it is possible that we just need to get together and answer her questions. I'll let you know the logistics and specific questions when I know them. Stay tuned!

Thanks,
Darcie

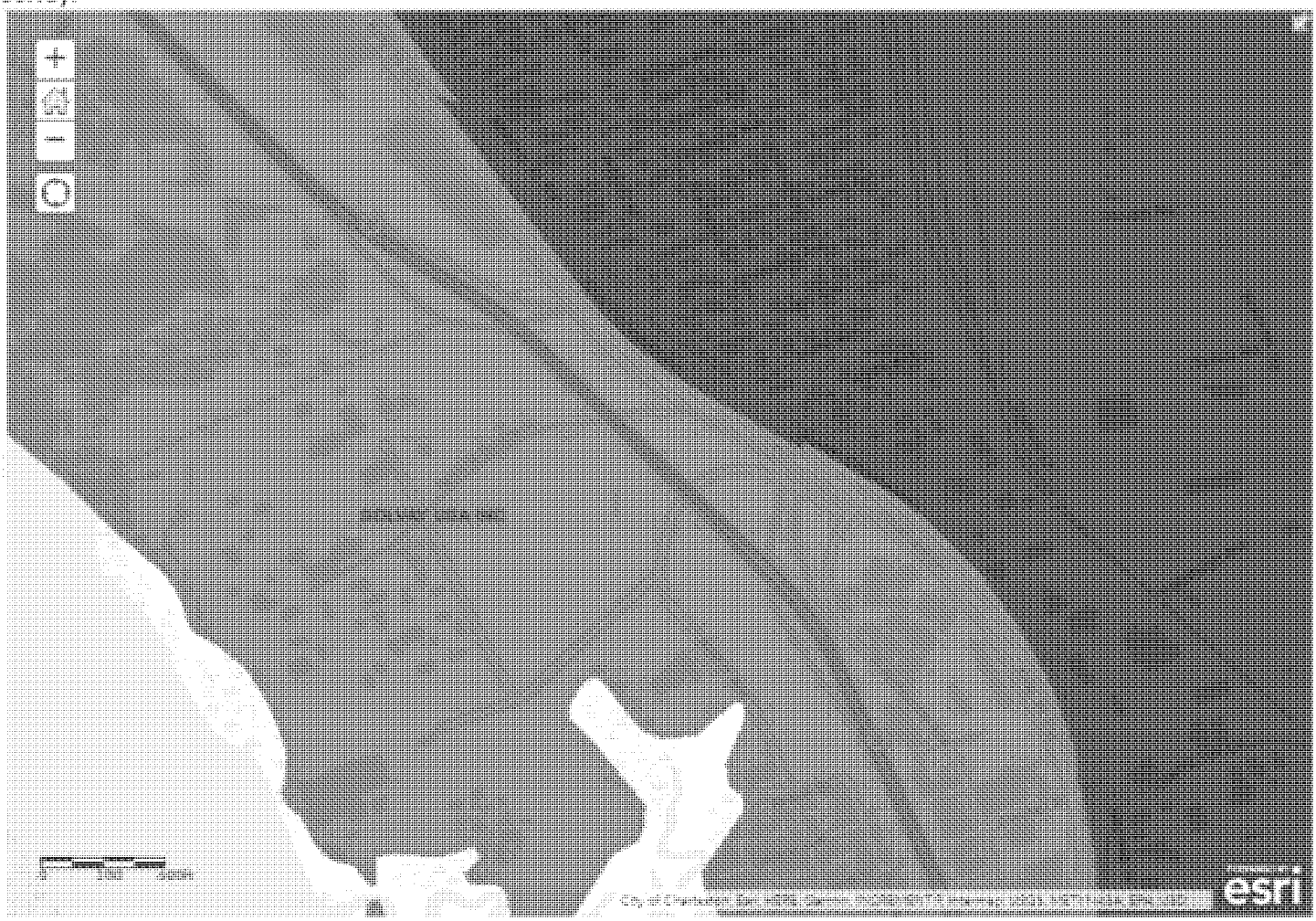
Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

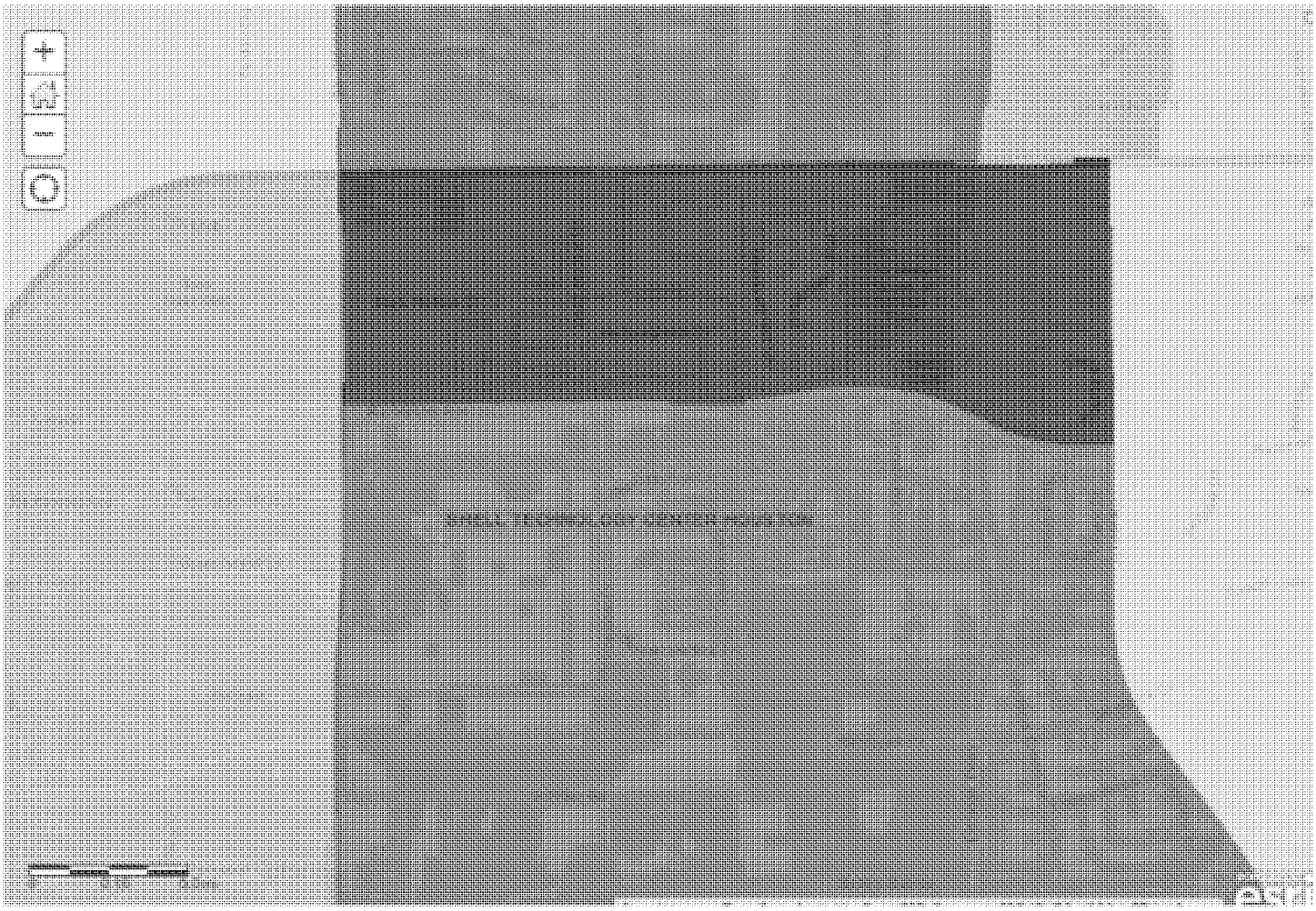
From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 8/15/2018 11:15:04 AM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: EtO facilities in elevated risk tracts

Ex. 5 Deliberative Process (DP)

Solvay:



Shell:



Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

From: Smith, Darcie
Sent: Tuesday, August 14, 2018 6:38 PM
To: Morris, Mark <Morris.Mark@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EtO facilities in elevated risk tracts

No worries – I certainly won't try this at home.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

In the MSA/facility table there are 6 facilities that are not included in your file. They are listed here:

ID	Facility	Address	City	State	Region	NATA tract	NATA block
588911	CRODA INC.	315 CHERRY LANE	NEW CASTLE	Delaware	03	100	153
3699811	Griffith Micro Science Inc	2973 Olympic Industrial Dr.	Smyrna	Georgia	04	200	221
4173711	Medtronic, Inc., Sterile Systems Operation	520 Watson SW	GRAND RAPIDS	Michigan	05	100	273
8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	2201 Old Spanish Trail	Westlake	Louisiana	06	100	841
3736811	SHELL TECHNOLOGY CENTER HOUSTON	3333 HWY 6 SOUTH	HOUSTON	Texas	06	300	291
3965211	SOLVAY USA INC	2151 KING ST EXT	CHARLESTON	South Carolina	04	100	240

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Morris, Mark
Sent: Tuesday, August 14, 2018 4:00 PM
To: Palma, Ted <Palma.Ted@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: EtO facilities in elevated risk tracts

Here are the facilities that have EtO emissions in the 106 tracts nationwide with total risk >= 100 in a million. The list does not include facilities that may be just outside a high risk tract and potentially drive the risk of that tract. I have joined all the tract risk data to the list of facilities for the tract it is in.
This was all done by the map app, but don't try this at home.

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 1/26/2018 4:04:11 PM
To: Thurman, James [Thurman.James@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]
CC: Strum, Madeleine [Strum.Madeleine@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: EtO facs- met data
Attachments: Blks_Went_Up_forJames.xlsx

Hi James –

We are taking a closer look at a handful of ethylene oxide emitting facilities that have block risks > 100-in-1 million in version 2 NATA. Madeleine has already gone in and commented on any emissions or parameter changes. We are going to look at receptor changes or locations. Can you please provide the gridded met data that each facility had in the modeling? We can talk about the format and/or logistics on Monday.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/13/2018 5:15:14 PM
To: Palma, Ted (Palma.Ted@epa.gov) [Palma.Ted@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]; Kelly Rimer [Rimer.Kelly@epa.gov]
Subject: Emailing: EtO Acute from USRTR 072418.xlsx
Attachments: EtO Acute from USRTR 072418.xlsx

Your message is ready to be sent with the following file or link attachments:

EtO Acute from USRTR 072418.xlsx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/14/2018 7:37:47 PM
To: Morris, Mark [Morris.Mark@epa.gov]
Subject: Emailing: EtO Acute from USRTR 072418.xlsx
Attachments: EtO Acute from USRTR 072418.xlsx

Still doesn't have chronic concs.

Your message is ready to be sent with the following file or link attachments:

EtO Acute from USRTR 072418.xlsx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/14/2018 11:09:06 PM
To: Rodman, Sonja [Rodman.Sonja@epa.gov]
Subject: Emailing: Facility checklist_Aug13 Final.edit.xlsx
Attachments: Facility checklist_Aug13 Final.edit.xlsx

I was cleaning up my email and saw this final version. It has the 14 (R6 one removed) and is the "final" short-action list.

Your message is ready to be sent with the following file or link attachments:

Facility checklist_Aug13 Final.edit.xlsx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/16/2018 4:12:56 PM
To: Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]
Subject: FW: R6 Facilities checklist
Attachments: Copy of call log for EO facilities in R6 (003).xlsx

Fyi. Will let you know if I need more.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Parker, Cindy
Sent: Thursday, August 16, 2018 11:18 AM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Donaldson, Guy <Donaldson.Guy@epa.gov>; Verhalen, Frances <verhalen.frances@epa.gov>; Madden, Joshua <madden.joshua@epa.gov>; Ahuja, Anupa <ahuja.anupa@epa.gov>; Larson, Darrin <Larson.Darrin@epa.gov>
Subject: R6 Facilities checklist

Here is what we have. As you know, Union Carbide is still being worked. Let me know if you have any questions.

Thanks,

Cindy K. Parker
US EPA Region 6, 6MM-AM
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733
Phone 214.665.7291

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 8/15/2018 5:44:09 PM
To: Koerber, Mike [Koerber.Mike@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]
CC: Davis, Alison [Davis.Alison@epa.gov]; Truesdell, Raymond [truesdell.raymond@epa.gov]
Subject: RE: List of 26 facilities 08 15 18.xlsx
Attachments: Copy of List of 26 facilities 08 15 18 REV1.xlsx

With new Solvay numbers and explanatory footnote.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Koerber, Mike
Sent: Wednesday, August 15, 2018 12:27 PM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Davis, Alison <Davis.Alison@epa.gov>; Truesdell, Raymond <truesdell.raymond@epa.gov>
Subject: RE: List of 26 facilities 08 15 18.xlsx

Thanks! Here's the version I sent to Clint to use for a discussion with him this afternoon – still to be scheduled. One thing to note is that Peter suggested we use the latest block (and, if available) tract level information for Solvay. We could include a footnote on these values, if necessary, to indicate that they reflect more current (not NATA) data.

Mike

From: Rimer, Kelly
Sent: Wednesday, August 15, 2018 10:40 AM
To: Koerber, Mike <Koerber.Mike@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Davis, Alison <Davis.Alison@epa.gov>; Truesdell, Raymond <truesdell.raymond@epa.gov>
Subject: List of 26 facilities 08 15 18.xlsx

Mike ,

Here is the table you requested. Please let me know if you have any questions.

Thanks,
Kelly

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 3/8/2018 3:19:55 PM
To: Strum, Madeleine [Strum.Madeleine@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: EO Facilities

That's fine if that facility is a no. Thanks for checking these over!

We are presenting it as our best estimate, so if we aren't perfect in our estimates, that is okay.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Strum, Madeleine
Sent: Thursday, March 08, 2018 10:17 AM
To: Palma, Ted <Palma.Ted@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: EO Facilities

I have one lingering issue –the facility below has a "**V1 Max Tract Cancer Risk (in 1 million)(from EthOx specific tract file)**" >100 but the formula results in less than 100 in a million for v2 (hybrid adjusted and pre-hybrid adjusted are both below 95). I made this one a "No" because I think the V1 tract risk is probably dominated by something other than ethylene oxide and it isn't even the Priority facility list we sent out during the NATA review.

Facility ID	Facility Name	State	City	Address	EPA Region	V1 MIR @ block (in 1 million)	V2 MIR @ block (in 1 million)	V1 Max Tract Cancer Risk (in 1 million) (from EthOx specific tract file)
6885911	BAYER MATERIALSCIENCE - SOUTH CHARLESTON	West Virginia	SOUTH CHARLESTON	437 MACCORKLE AVE.,SW	03	157.840	162.412	208.492

Madeleine

From: Palma, Ted
Sent: Thursday, March 8, 2018 9:16 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: EO Facilities

That's really weird that the formula actually worked with the > instead of the comma can you close file so I can see
Also what external links are in this file? We probably need to get rid of those

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Strum, Madeleine
Sent: Thursday, March 08, 2018 8:28 AM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EO Facilities

Oh you have an error in your formula. I'm going to correct it and see the difference. You had a ">" instead of a ","

From: Palma, Ted
Sent: Thursday, March 8, 2018 8:17 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: EO Facilities

OK feel free to override any you think should be yes, I would rather be conservative!

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Strum, Madeleine
Sent: Thursday, March 08, 2018 8:10 AM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EO Facilities

I found it. 2nd TAB. I think Shell, Croda and Santa Teresa should be changed to yes. (see column N)

From: Palma, Ted
Sent: Thursday, March 8, 2018 7:48 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: EO Facilities

I just hide them not remove them?

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Strum, Madeleine
Sent: Thursday, March 08, 2018 7:27 AM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: EO Facilities

Hi Ted
I took a look at the file on SharePoint. Looks like all those columns were removed and I couldn't find the intermediate calcs (I cant find the file I downloaded yesterday).

I just have one comment ---are we confident that these 5 facilities, that had no emissions changes and impacted v1 tract risk do not impact v2 tract risk? I think it is correct – but was just double checking.

Facility ID	Facility Name	State	City	Address	EPA Region	V1 MIR @ block (in 1 million)	V2 MIR @ block (in 1 million)	V1 Max Tract Cancer Risk (in 1 million) (from EthOx specific tract file)	Is Census Tract Risk expected to be > 100 in 1-million in V2?
3736811	SHELL TECHNOLOGY CENTER HOUSTON	Texas	HOUSTON	3333 HWY 6 SOUTH	06	422	291	195	No
6885911	BAYER MATERIALSCIENCE - SOUTH CHARLESTON	West Virginia	SOUTH CHARLESTON	437 MACCORKLE AVE.,SW	03	158	162	208	No
588911	CRODA INC.	Delaware	NEW CASTLE	315 CHERRY LANE	03	153	153	111	No
7582111	Santa Teresa Facility	New Mexico	Santa Teresa	2400 Airport Rd	06	136	135	131	No

10233211	STERIGENICS US INC	California	LOS ANGELES	4801-63 E 50TH ST	09	138	131	111	No

Thanks
Madeleine

From: Palma, Ted
Sent: Wednesday, March 7, 2018 2:49 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: EO Facilities

Look at table now and let me know what you think?

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Strum, Madeleine
Sent: Wednesday, March 07, 2018 1:17 PM
To: Palma, Ted <Palma.Ted@epa.gov>
Subject: RE: Eo Facilities

I like the simple approach but I there may have been one more adjustment that would bring in a few additional to focus on. Could we possibly have used Steve's value if it was higher (to be conservative) ? I recall we did say if it was 95, we count it (round) as 100.

I cant seem to find the file that had all the methodologies. I was thinking that might help me refresh my memory. Or just go with what you had.

Madeleine

From: Palma, Ted
Sent: Wednesday, March 7, 2018 12:07 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: Eo Facilities

We need to resolve the discussion we had about the best way to apply the hybrid to the EO Tract risk, I suggest that we just use the V1 ratio (I think you proposed that too) we can take the file on Sharepoint that has ETOX_max_tract_cancerrisk_withpol and apply there and re-sum the tract risk or maybe keep it simple and just apply the EO ratio to the total tract risk and assume it's mostly EO anyway?

Need to resolve this quickly
Ted

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 6/21/2018 4:21:45 PM
To: Witt, Jon [Witt.Jon@epa.gov]; Sieffert, Margaret [Sieffert.Margaret@epa.gov]
Subject: Heads up - For R5 mtg at 1
Attachments: R5 Elevated Risk.pptx

Importance: High

For your advance info – we're adding this slide.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Palma, Ted
Sent: Thursday, June 21, 2018 12:08 PM
To: Langdon, Robin <Langdon.Robin@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: Emergency briefing

Here is what Madie and I put together for R5

Ted Palma
USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 6/27/2018 5:35:37 PM
To: Stone, William [stone.william@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]
Subject: RE: OAR AA Briefing Today RE: EtO facilities in 2014 NATA

Thanks Will.

An update for you – we did not get into any facility specifics this morning.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Stone, William
Sent: Wednesday, June 27, 2018 1:09 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: FW: OAR AA Briefing Today RE: EtO facilities in 2014 NATA

FYI.

From: Johnson, Karen T.
Sent: Wednesday, June 27, 2018 11:46 AM
To: Doolan, Stephanie <Doolan.Stephanie@epa.gov>; Jay, Michael <Jay.Michael@epa.gov>; Werner, Leslye <Werner.Leslye@epa.gov>; Algoe-Eakin, Amy <Algoe-Eakin.Amy@epa.gov>; Stone, William <stone.william@epa.gov>
Subject: RE: OAR AA Briefing Today RE: EtO facilities in 2014 NATA

Hi Friends
FYI - our inspector Sean Bergin has completed Air and TRI inspections of the Midwest Sterilization Co facility in Jackson, MO. Sean found the facility to be complying with their permit and not have any emission exceedances. I am reviewing the report now.
-Karen

From: Doolan, Stephanie
Sent: Wednesday, June 27, 2018 11:38 AM
To: Jay, Michael <Jay.Michael@epa.gov>; Werner, Leslye <Werner.Leslye@epa.gov>; Algoe-Eakin, Amy <Algoe-Eakin.Amy@epa.gov>
Cc: Stone, William <stone.william@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>
Subject: OAR AA Briefing Today RE: EtO facilities in 2014 NATA

All,

Will was contacted by OAQPS late yesterday and told that the AA will be briefed today about the 2014 NATA risk modeling results, and, particularly, about risks from ethylene oxide facilities. As I emailed you about earlier (see below), Region 7 has the highest block risk in the nation for the BCP facility in Verona, MO, but the tract risk is much lower. For Midwest Sterilization Corp in Cape

Girardeau, the tract risk is the highest in R7 also due to EtO emissions. *The risk from EtO is higher in the 2014 NATA release because the IRIS toxicity value was re-evaluated and lowered by 40%.*

Please let me know if you have any questions. Will and I will keep you posted about when to expect the public release of the 2014 NATA and any briefing materials that are prepared to support that release.

Thank you!

Stephanie B. Doolan
Air & Waste Management Division
Air Planning and Development Branch
(913) 551-7719
Doolan.stephanie@epa.gov

From: Doolan, Stephanie
Sent: Tuesday, June 13, 2017 3:06 PM
To: Jay, Michael <jay.michael@epa.gov>; Werner, Leslye <Werner.Leslye@epa.gov>; Kemp, Lachala <Kemp.Lachala@epa.gov>
Cc: Stone, William <stone.william@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>
Subject: RE: EtO facilities in MO / 2014 NATA Update

Will and I have been looking at the tract level risks and below is the information he put together for me. The Cape Girardeau Co. facility has the highest risk of the EtO facilities and of all facilities in the four-state region. As you can see from the previous email which contained the facility-specific risk, the tract level risk is much less, but still significant. We have discussed the facility with MDNR and Karen Johnson has put it on the 2018 inspection list. Will and I have joined a NATA sub-group to discuss and share information on EtO facilities.

Please let us know if you have questions or comments. Unless there is a "game-changer" that I don't know about now, these facilities will be the highest risk facilities in the public release of the 2014 NATA. With the help of the subgroup, we'll be ready with an internal briefing to prepare us for the public release and any questions we may receive. Look forward (or not!) to a briefing closer to the release date.

\Stephanie, I downloaded the 4 files. I started with cancer risk by poll. We have a couple that stand out. Here's all the tracts above 60 per million.

State	EPA Region	County	FIPS	Tract	Population	Total Cancer Risk (per million)
MO	EPA Region 7	Cape Girardeau	29031	29031880400	6908	193.882
IA	EPA Region 7	Linn	19113	19113002200	1832	81.258
MO	EPA Region 7	Lawrence	29109	29109470300	5445	78.071
IA	EPA Region 7	Linn	19113	19113002600	2416	69.474
MO	EPA Region 7	Cape Girardeau	29031	29031880500	9040	67.215
MO	EPA Region 7	Cape Girardeau	29031	29031880200	3822	64.518
MO	EPA Region 7	Cape Girardeau	29031	29031000000	75674	60.969

MO	EPA Region 7	Cape Girardeau	29031	29031880300	4387	60.649

It looks like Ethylene oxide is biggest contributor here.

ETHYLENE OXIDE
164.920
54.726
51.115
43.730
37.618
35.337
31.478
32.344

From: Doolan, Stephanie
Sent: Tuesday, April 11, 2017 2:10 PM
To: Algoe-Eakin, Amy <algoe-eakin.amy@epa.gov>; Jay, Michael <jay.michael@epa.gov>
Cc: Stone, William <stone.william@epa.gov>; Johnson, Karen T. <Johnson.Karent@epa.gov>
Subject: EtO facilities in MO / 2014 NATA Update

EIS facility_id	facility_name	FIPS	State or Tribe	Total Ethylene Oxide Risk
7281511	BCP INGREDIENTS-VERONA PLANT	29109	Missouri	8907.807509
7990911	BASF Corporation	34041	New Jersey	7713.975987
7258511	WILLIAM BEAUMONT HOSPITAL	26125	Michigan	6047.062669
8378211	MONTEFIORE MEDICAL CTR-111 E 210TH ST	36005	New York	5192.504445
2686511	C R Bard	13217	Georgia	4632.372597
4953611	AIR PRODUCTS PERFORMANCE MFG INC	55105	Wisconsin	4428.806856
2534011	Kendall Healthcare Products	13245	Georgia	3089.318432
14386711	BAKERSFIELD MEMORIAL HOSPITAL	06029	California	2967.903862
14657611	B BRAUN MED INC/ALLENTOWN	42077	Pennsylvania	2326.799971
7351811	Monument Chemical Kentucky LLC	21163	Kentucky	2266.730014
7451011	BCP Ingredients Inc	22047	Louisiana	2254.995987

7703311	Midwest Sterilization Corp-Jackson	29031	Missouri	2004.322124

Just an FYI. There are two facilities in Missouri that are showing greater than 100 in one mil risk for ethylene oxide. Above is an excerpt from an xls file from OAQPS of all EtO facilities. Keep in mind this is facility risk at this point. In about another month, we'll have the modeled data in the app by census tract, which could change the picture. This is something new this year for the 2014 NATA b/c EPA lowered the IRIS toxicity value by a factor of 50. MDNR has been made aware and they say that the emissions are correct. Karen put the Midwest Sterilization Corp facility on the target list. My understanding is that these facilities are within their permitted limits as minor sources. When we see how they model at the census tract level, I'll report back. I was just surprised that we had the highest risk EtO facility in the nation.

Thank you!

Stephanie B. Doolan
Air & Waste Management Division
Air Planning and Development Branch
(913) 551-7719
Doolan.stephanie@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 7/20/2018 7:22:08 PM
To: Bremer, Kristen [Bremer.Kristen@epa.gov]
Subject: Emailing: RSEI list from Jim 071918.xlsx
Attachments: RSEI list from Jim 071918.xlsx

Here's what Jim pulled from RSEI - all facs emitting EtO in RSEI. Any interpretation you or Jackie can provide re: the "score" would be most helpful. Eventually, I'll merge this with other data.

Your message is ready to be sent with the following file or link attachments:

RSEI list from Jim 071918.xlsx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 1/25/2018 7:16:27 PM
To: Morris, Mark [Morris.Mark@epa.gov]
CC: Palma, Ted [Palma.Ted@epa.gov]
Subject: EtO risks - NATA v HEM
Attachments: Blks_Went_Up.xlsx

I don't know what to make of all this.

The attached spreadsheet is those facilities in NATA v2 that had a block risk greater than 100, where the v2 results went up from v1. Both v1 and v2 block risks are shown (columns g and h), as well as the latest US-RTR results (column i). Other notes (e.g., emissions went up) can be found in columns l, m, and n.

Thanks for any light you can shed on it!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
(919) 541-2076

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 7/25/2018 1:29:21 PM
To: Palma, Ted (Palma.Ted@epa.gov) [Palma.Ted@epa.gov]
Subject: Emailing: july 18 SP copy of MASTER_ETOX_v1_v2_highrisk_comparison.xlsx
Attachments: july 18 SP copy of MASTER_ETOX_v1_v2_highrisk_comparison.xlsx

Lots of columns hidden, so if you don't see something, unhide some columns.

Your message is ready to be sent with the following file or link attachments:

july 18 SP copy of MASTER_ETOX_v1_v2_highrisk_comparison.xlsx

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 6/13/2018 11:10:29 PM
To: Sasser, Erika [Sasser.Erika@epa.gov]
CC: Noonan, Jenny [Noonan.Jenny@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]
Subject: NATA slides for Region 6 staff
Attachments: 2014 NATA Results Briefing for R6 staff 061318_needsmaps.pptx

Hi Erika –

Attached are a draft of the slides for tomorrow's meeting with region 6 staff. (Please remember that there are additional changes we will make for Bill.)

We've added back in the context and background and moved the national results to the appendix. Mark is making two maps and there are placeholders for them. One is the broad map zoomed into Region 6 and the other will be the ~50 km around Denka (which should pick up at least 2 EtO facs.) We also added info on the facilities in the R6 MSAs. And, we added in some comms-related items.

Let us know what comments you have.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 6/27/2018 1:12:12 PM
To: Caparoso, Jennifer [Caparoso.Jennifer@epa.gov]
Subject: FW: NATA Results: Materials in prep for tomorrow's briefing with Bill W
Attachments: 2014 NATA Results Briefing 06_27_18.pptx

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Smith, Darcie
Sent: Wednesday, June 27, 2018 8:58 AM
To: Palma, Ted (Palma.Ted@epa.gov) <Palma.Ted@epa.gov>; Morris, Mark <Morris.Mark@epa.gov>; Woody, Matthew <Woody.Matthew@epa.gov>; Truesdell, Raymond <truesdell.raymond@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <eyth.alison@epa.gov>; Phillips, Sharon <Phillips.Sharon@epa.gov>; Thurman, James <Thurman.James@epa.gov>; Cook, Rich <Cook.Rich@epa.gov>
Subject: FW: NATA Results: Materials in prep for tomorrow's briefing with Bill W

Here are the slides for this morning's NATA mtg. It will largely focus on ethylene oxide.

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: South, Peter
Sent: Tuesday, June 26, 2018 6:21 PM
To: Harnett, Bill <Harnett.Bill@epa.gov>; Koerber, Mike <Koerber.Mike@epa.gov>; McKinney, Voronina <mckinney.voronina@epa.gov>; OAQPS WOPS <OAQPS_WOPS@epa.gov>; OAR Briefings <OAR_Briefings@epa.gov>
Cc: Sasser, Erika <Sasser.Erika@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>; Houyoux, Marc <Houyoux.Marc@epa.gov>; Jones, Rhea <Jones.Rhea@epa.gov>; Mozingo, Kristal <Mozingo.Kristal@epa.gov>; Wayland, Richard <Wayland.Richard@epa.gov>; Bremer, Kristen <Bremer.Kristen@epa.gov>; Tsirigotis, Peter <Tsirigotis.Peter@epa.gov>; Koerber, Mike <Koerber.Mike@epa.gov>; Harnett, Bill <Harnett.Bill@epa.gov>; Riha, Kristin <Riha.Kristin@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: NATA Results: Materials in prep for tomorrow's briefing with Bill W

I have attached the briefing materials in prep for tomorrow's NATA meeting with Bill.

Please call me or Mike with any questions relating to this information.

Thank you.

Pete South
OAR/OAQPS/IO
U.S. EPA
office: 919 541-5359
cell Ex. 6 Personal Privacy (PP)

Organizer Wehrum, Bill

Subject NATA Results

Location C401AHQ Room WJC-N 5400 + Video with RTP Room C401A + Ex. 6 Personal Privacy (PP) (no code)

Start time Wed 6/27/2018 10:00 AM All day event

End time Wed 6/27/2018 10:45 AM

TO: Wehrum, Bill; Harlow, David; Woods, Clint; Tsirigotis, Peter; Koerber, Mike; Wayland, Richard; Sasser, Erika; Langdon, Robin; Houyoux, Mar
Darcie; Strum, Madeleine; Farkas, Caroline; Shelow, David; Palma, Ted; Eyth, Alison; Morris, Mark; Phillips, Sharon; Thurman, James; Bremer, K
Jenny; Cook, Rich; Grundler, Chris; Dunham, Sarah; Edwards, Jonathan;

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 6/21/2018 4:43:57 PM
To: Mozingo, Kristal [Mozingo.Kristal@epa.gov]; Sasser, Erika [Sasser.Erika@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]
Subject: 1 pm MAterials
Attachments: 2014 NATA Results Briefing for OAR R5.pptx

Importance: High

Thanks to Mark, Ted, and Robin!!

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

Message

From: Smith, Darcie [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=3AE3C2377EFB42879B943DB8796DDC05-SMITH, DARCIE]
Sent: 6/14/2018 3:13:33 PM
To: Mozingo, Kristal [Mozingo.Kristal@epa.gov]
Subject: Materials for 3pm NATA meeting
Attachments: 2014 NATA Results Briefing for R6 staff.pptx

Hi Kristal –

Will you please attach these to the 3 pm NATA meeting today?

Thank you!
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

National Air Toxics Assessment (NATA): 2014 Results Summary

Briefing for Region 6

June 14, 2018

Key Messages

- NATA is a screening tool that identifies areas for further analysis
  - It does not single out one area of the country as having the highest risks
  - It uses estimates of emissions and computer models to approximate risks; it is not designed to determine actual health risks to individual people
- In the 2014 NATA results, Region 6 has 8 MSAs with cancer risks ≥ 100-in-1 million
  - Risks in all MSAs are driven by ethylene oxide emissions (except New Orleans-Metairie, which is also driven by chloroprene)
- OAR is currently discussing ways to address these risks

What is NATA?

- Screening-level characterization of air toxics across the nation
  - Nationwide assessment with census **tract** resolution (about 74,000 tracts)
  - Based on air quality modeling of emissions from: stationary, mobile, biogenic sources, and fires using the National Emissions Inventory
  - Ambient and exposure concentration estimates for 175 HAP plus diesel particulate matter (DPM)
  - Cancer and noncancer risk estimates for about 140 Clean Air Act hazardous air pollutants (HAP) with health data based on chronic exposures
- This is the 6th NATA (2014 NATA)
  - Previous assessments for inventory years 1996, 1999, 2002, 2005, 2011
- Primary NATA Uses
  - Planning tool for EPA, state/local/tribal organizations
    - To identify locations of interest for further study
    - To prioritize pollutants and emission sources/types
    - To inform monitoring programs
  - Serve partner needs by developing innovative data and communication tools

Limitations

- Emissions, modeled ambient concentrations, and estimated inhalation exposures are only from sources of outdoor origin via the inhalation route of exposure
- Results are more uncertain at finer geographic scales
  - Surrogates used to allocate mobile and nonpoint source emissions
- Results should not be used to compare risks among different areas of the country
  - Underlying emissions data vary in level of detail from state to state
- Results should not be compared among NATAs
  - Changes in results are due to actual emission changes as well as the use of different modeling and emissions processing techniques. In addition, other assessment inputs, such as meteorological data and health benchmark values, change over time.

2014 NATA Analytical Steps

Compile National Emissions Inventory (2014 NEI)

2014 NEI includes both stationary, mobile and natural sources (fires, biogenics).

NATA includes 175 HAP and diesel particulate from mobile sources.

Estimate ambient concentrations of air toxics across U.S.

Uses CMAQ and AERMOD to predict census tract ambient concentrations nationwide.

Estimate population exposures

Includes an exposure model (HAPEM7) to account for human activity data, commuting patterns, and near roadway exposures.

Characterize potential public health risks from inhalation

Census tract level cancer and noncancer risks nationwide.

Improvements & Updates for 2014

- Inventory:
  - ***Updated spatial allocation for mobile and nonpoint sources***
  - NEI improved in many areas e.g., oil & gas, onroad, nonroad, commercial marine vessels
  - Areas outside CMAQ domain (AK, HI, PR, VI) better characterized for AERMOD modeling
  - New emissions processing tool built for preparing AERMOD emissions
- Photochemical/Dispersion Modeling:
  - In CMAQ: improved boundary conditions and carbon tetrachloride treatment; nine more HAP modeled than in 2014
  - More spatially refined meteorology using prognostic meteorological modeling (WRF)
- Exposure Modeling:
  - New features of HAPEM 7, including updated population and commuting patterns, activity pattern data, and four additional commuting-related microenvironments
- Risk Characterization:
  - ***Updated health benchmarks – ethylene oxide, acrolein, benzo(a)pyrene***
- Outreach:
  - Updated Map App features
  - Potential story map

Pre-Release Results

Do not cite, quote or release

The NATA team is still performing QA/QC
of the data prior to public release

MSAs with Elevated Cancer Risks

2014 NATA Version 2

MSA Name	# Tracts
New Orleans-Metairie, LA	19
Allentown-Bethlehem-Easton, PA-NJ	18
Houston-The Woodlands-Sugar Land, TX	11
Chicago-Naperville-Elgin, IL-IN-WI	11
Baton Rouge, LA	9
Beaumont-Port Arthur, TX	8
Charleston, WV	6
Denver-Aurora-Lakewood, CO	4
Atlanta-Sandy Springs-Roswell, GA	3
Laredo, TX	3
Pittsburgh, PA	3
Marshall, TX	2
Charleston-North Charleston, SC	2
Lake Charles, LA	2
Aguadilla-Isabela, PR	1
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1
Cape Girardeau, MO-IL	1
Grand Rapids-Wyoming, MI	1
Las Cruces, NM	1

8

MSAs with Elevated Cancer Risks

2014 NATA Version 2

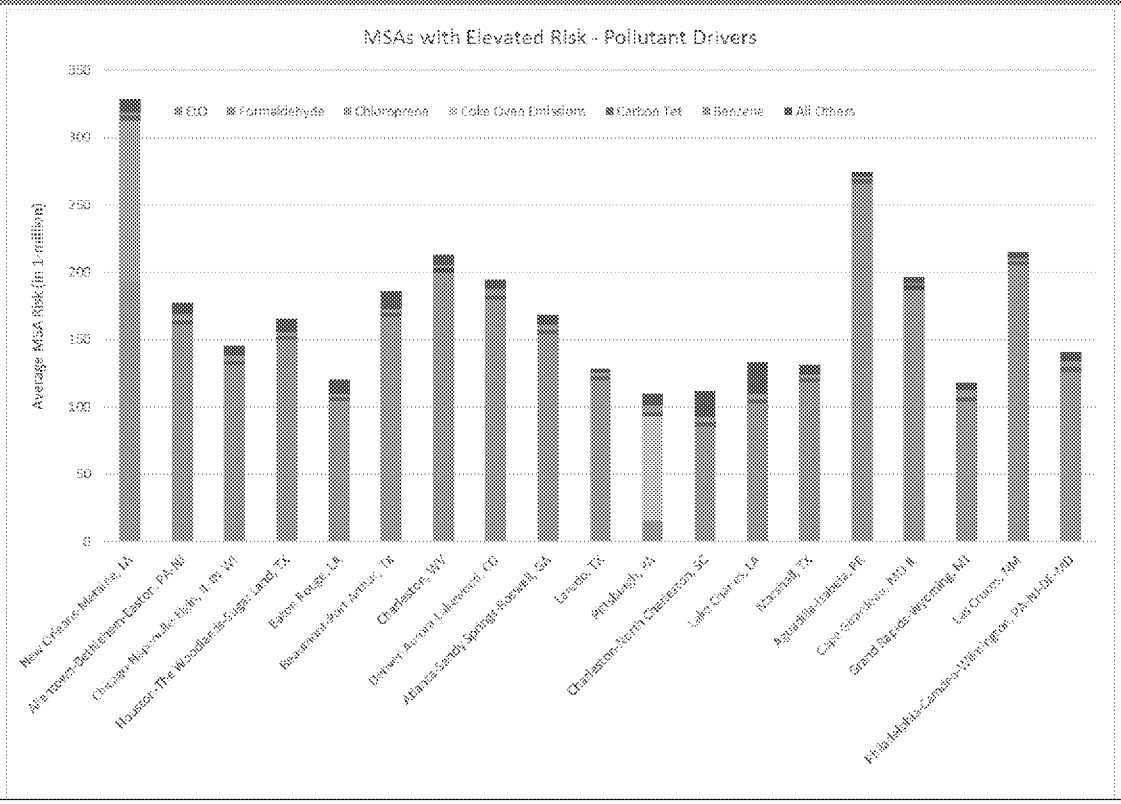
MSA (Region 6 MSAs)	#Tracts >100-in-1 million	Max Tract Cancer-1 million	MSA (Region 6 MSAs)	#Tracts >100-in-1 million	Max Tract Cancer-1 million
New Orleans-Metairie, LA*	***19***	***2,000***	Pittsburgh, PA**	3	100
Allentown-Bethlehem-Easton, PA-NJ	18	600	Charleston-North Charleston, SC	2	100
Chicago-Naperville-Elgin, IL-IN-WI†	11	300	***Lake Charles, LA***	***2***	***100***
Houston-The Woodlands-Sugar Land, TX	***11***	***300***	***Marshall, TX***	***2***	***200***
Baton Rouge, LA	***9***	***200***	Aguadilla-Isabela, PR	1	300
Beaumont-Port Arthur, TX	***8***	***300***	Cape Girardeau, MO-IL	1	200
Charleston, WV	6	400	Grand Rapids-Wyoming, MI	1	100
Denver-Aurora-Lakewood, CO†	4	500	***Las Cruces, NM***	***1***	***200***
Atlanta-Sandy Springs-Roswell, GA	3	200	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD†	1	100
Laredo, TX	***3***	***100***			

** With the exception of New Orleans-Metairie, LA (chloroprene) and Pittsburgh, PA (coke oven emissions), the primary risks are driven by emissions of ethylene oxide from point sources.

† The following 5 MSAs were also in the 2011 NATA as MSAs with elevated cancer risks: Chicago-Naperville-Elgin, IL-IN-WI; Denver-Aurora-Lakewood, CO; New Orleans-Metairie, LA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, and Pittsburgh, PA.

MSAs with Elevated Cancer Risks – Pollutant Drivers

2014 NATA Version 2



Ethylene Oxide Risks

- EtO emissions from point sources contribute at least 50% of cancer risks ≥ 100-in-1 million in 98 (of 106) census tracts in 18 (of 19) MSAs
- 93% of tracts with elevated risks are in four regions: 52% in Region 6, 25% in Region 3, 11% in Region 5, and 5% in Region 4
- 19 EtO facilities drive these risks: 10 sterilizers and 9 chemical plants
- Data review activities:
  - OAQPS contacted trade associations and facilities
  - Regional staff also contacted states and facilities
  - Any revised data received to date has been incorporated into NATA or evaluated for appropriateness for inclusion

Region 6 MSAs with Elevated Cancer Risks

2014 NATA Version 2

MSA Name	# Tracts
New Orleans-Metairie, LA	19
Beaumont-Port Arthur, TX	8
Laredo, TX	3
Marshall, TX	2
Lake Charles, LA	2
Baton Rouge, LA	9
Las Cruces, NM	1
Houston-The Woodlands-Sugar Land, TX	11

Facilities in LA w/ Elevated Risks

2014 NATA Version 2

MSA Area Name	Facility	Type of Facility	Potential Applicable MACT to Risk Driving Emissions	Review
New Orleans-Metairie, LA	Denka	Chemical plant	n/a	n/a
	BCP Ingredients	Chemical plant	NOT (HON, MON, OLD, MCM, or Ethylene Prod.)	Facility. No changes.
	Union Carbide St. Charles	Chemical plant	HON, Polyols	Facility. TBD.
Lake Charles, LA	Air Products Reserve Plant	Chemical plant	NOT (HON, MON, OLD, MCM, or Ethylene Prod.)	LA DEQ. No changes.
Baton Rouge, LA	Taminco	Chemical plant	NOT (HON, MON, OLD, MCM, or Ethylene Prod.)	LA DEQ. No changes.

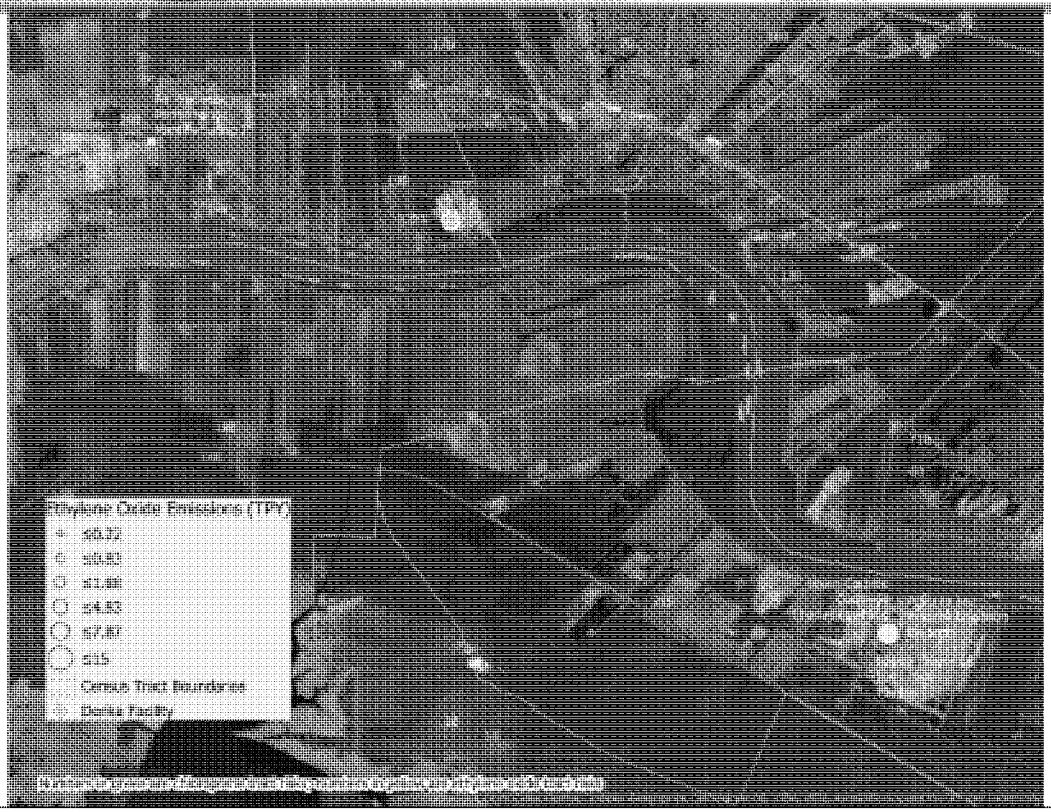
Facilities in TX/NM w/Elevated Risks

2014 NATA Version 2

MSA Area Name	Facility	Type of Facility	Potential Applicable MACT	Review
Beaumont-Port Arthur, TX	PORT NECHES PLANT	Chemical plant	HON	TCEQ. No changes.
Laredo, TX	Midwest Sterilization Corp	Sterilizer	EtO Emis. Stds for Sterilization Facs (Subpart O)	TRI. No changes.
Marshall, TX	TEXAS OPERATIONS	Chemical plant	HON	Fac. Minor changes.
Houston-The Woodlands-Sugar Land, TX	SHELL TECHNOLOGY CENTER HOUSTON	Chemical plant	NOT (HON, MON, OLD, MCM, or Ethylene Prod)	TCEQ. No changes.
Las Cruces, NM	Santa Teresa Facility	Sterlilizer	EtO Emis. Stds for Sterilization Facs (Subpart O)	Emissions reduced after 2014.

Census Tracts Near LaPlace, LA w/ Elevated Cancer Risks from EtO and Chloroprene

2014 NATA Version 2



Moving Forward

- Planned Release: Mid-August 2018
- Steps Before Release:
  - June/July -- briefings for Office Directors, AAs, and Regions
    - June 21 – OAR Management
    - June 25 (week of) – OAR/R6 Leadership
  - ~June 22 – share NATA results with regions
  - June/July – develop communications materials, webpages
    - Outreach to affected facilities, state agencies, etc.
  - Early August -- share results with state/local/tribal agencies for 2-week preview period

Communications and Outreach

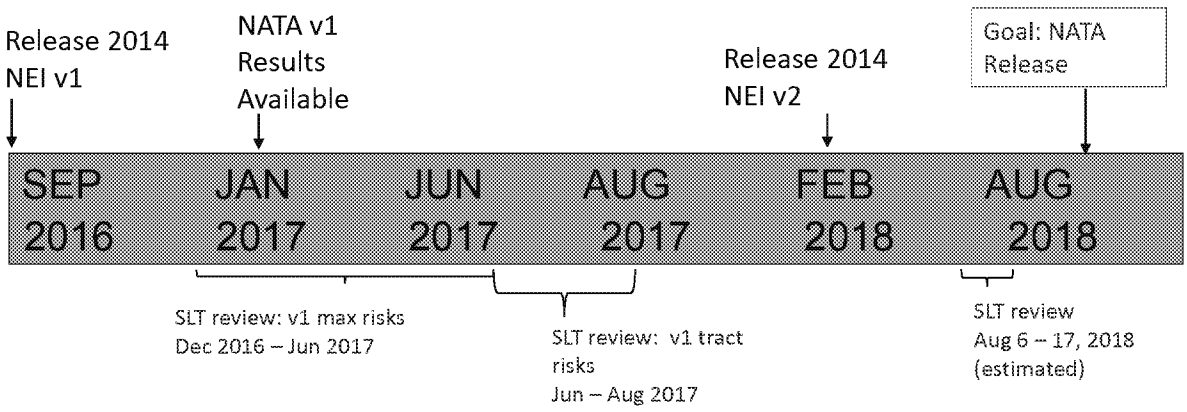
- HQ plans to prepare general materials on NATA and ethylene oxide, including:
  - Qs & As
  - Talking Points
  - Fact Sheet(s)
- We stand ready to support the region with developing any materials specific to their states/localities, including:
  - Regional talking points
  - Draft press releases
  - Other targeted materials as needed

Appendix

Results, Outreach, and Documentation

- Tabular results by pollutant and source type:
  - Emissions (facility, grid, county level)
  - Modeled ambient concentrations (census tract, county, state, national)
    - 175 individual pollutants included; 38 source group summaries
    - 49 pollutants included in hybrid analysis (modeled in CMAQ)
  - Exposure concentrations (census tract, county, state, national)
    - 175 pollutants; 38 source group summaries
  - Cancer and noncancer risk driver summaries (census tract, county, state, national)
    - 71 carcinogens and 106 noncarcinogens; 38 source group summaries
    - Cancer risks in 1 million (MIR); Noncancer risks expressed as Hazard Index (HI)
  - Generally used by researchers, data-savvy users
- Visual display of tabular results in interactive Map App
  - Can help users identify the sources and pollutants that contribute to potential risks in their community
  - Available on tablets and smartphones
  - Often used by the press
- Webpages with methods, results, FAQs and other references
- Technical support document and related documentation

Process & S/L/T Outreach



About 40 States participated in NATA Review

Source Attribution –Concentrations/Risks by 38 Groups

ONROAD
Light duty gas on-network
Light duty diesel on-network
Refueling
Light duty gas off-network
Light duty diesel off-network
Heavy duty gas on-network
Heavy duty diesel on-network
Heavy duty gas off-network
Heavy duty diesel off-network
Heavy duty diesel hoteling

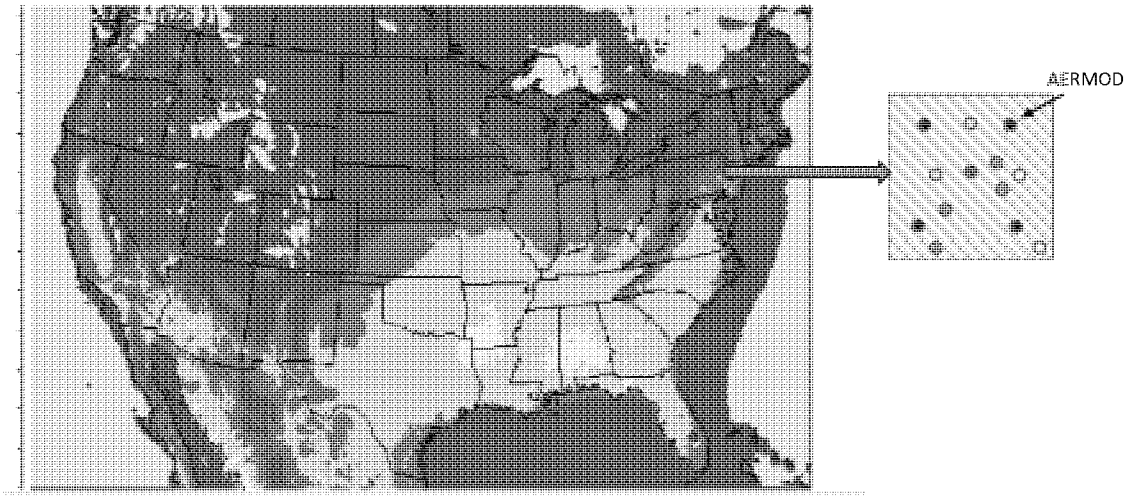
NONROAD
Recreational vehicles, pleasure craft
Construction
Commercial Lawn & Garden
Residential Lawn & Garden
Agricultural Equipment
Commercial Equipment
All Other Nonroad Equipment
Commercial Marine Vessels Ports C1/C2
Commercial Marine Vessels Ports C3
Commercial Marine Vessels Underway
Locomotives
Airports (point)
Railyards (point)

NONPOINT STATIONARY
Oil & Gas
Residential Wood Combustion
Miscellaneous Nonindustrial
Commercial Cooking
Solvents and Coatings
Storage and Transfer, Bulk Terminals, Stage1
Fuel Combustion except residential wood
Industrial
Waste Disposal
Agricultural livestock

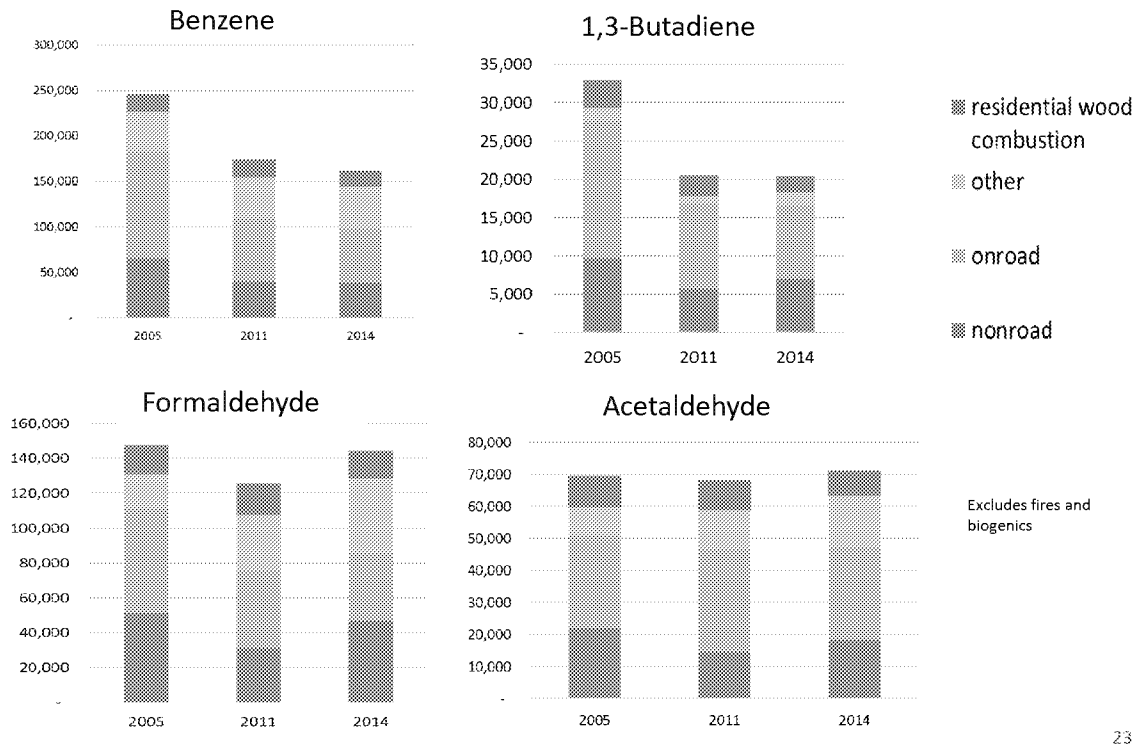
POINT
Stationary point

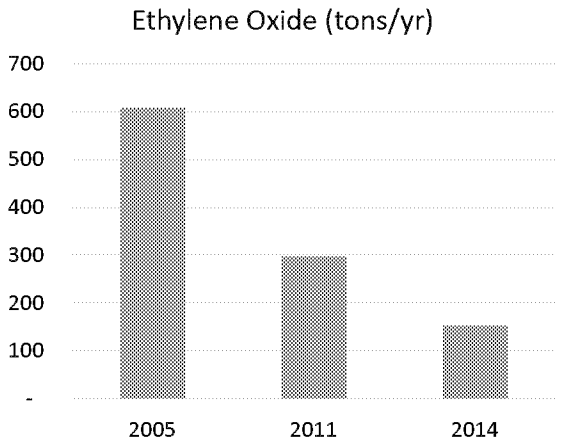
OTHER
Fires -primary*
Biogenics - primary *
Secondary formation [includes all sources]
Background
*not modeled in CMAQ

Hybrid Approach -
Combines CMAQ and AERMOD in each grid cell



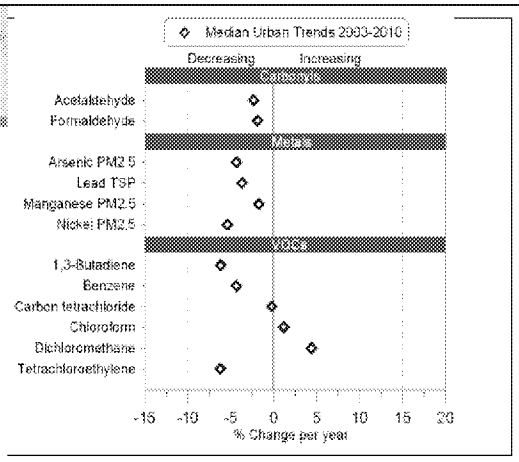
consistent MET and emissions across CMAQ and AERMOD


Benzene
300,000
250,000
200,000
150,000
100,000
50,000
-
2005
2011
2014
1,3-Butadiene
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
2005
2011
2014
residential wood combustion
other
onroad
nonroad
Formaldehyde
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
-
2005
2011
2014
Acetaldehyde
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
2005
2011
2014
Excludes fires and biogenics

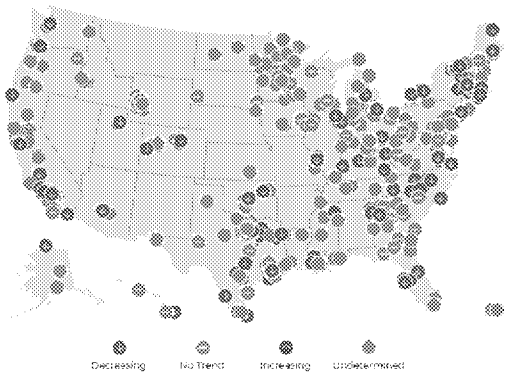

Ethylene Oxide (tons/yr)
700
600
500
400
300
200
100
-
2005
2011
2014

Can Use Monitoring Data to Assess Trends

Report to Congress – trends across urban monitors, 2003-2010

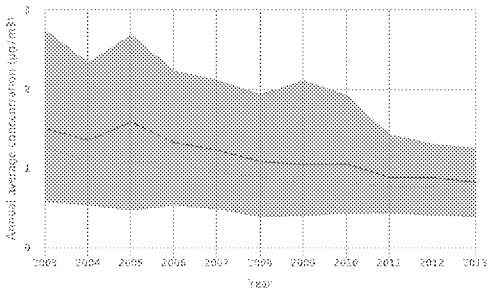


Benzene Monitors – 2003 to 2016 Concentration Trend



Report on the Environment

Exhibit 3. Ambient benzene concentrations in the U.S., 2003–2013



25

National Cancer Risk Results

- Population-weighted, national-average cancer risk estimated to be **30-in-1 million**
- 106 tracts and 470,000 people estimated to have a cancer risk ≥ 100-in-1 million
- 19 MSAs estimated to have at least 1 census tract ≥ 100-in-1 million
- Tracts ≥ 100 in-1 million primarily driven by point source emissions
  - 57 of 106 tracts have risks ≥ 100-in-1 million from ethylene oxide ***alone***
- Other tract-level pollutant drivers include chloroprene, coke oven emissions, formaldehyde, chromium (VI) compounds
- Secondary formation (formaldehyde and acetaldehyde) estimated to contribute about 65 percent of the cancer risk nationwide

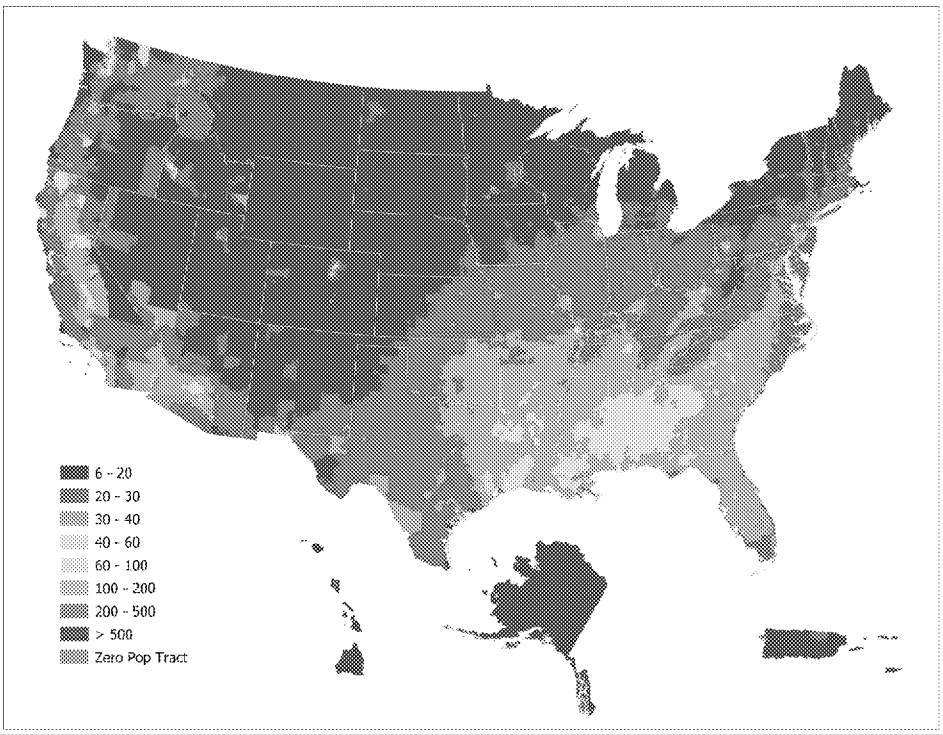
2011 NATA Results

- National-average cancer risk: 40-in-1 million
- 120 tracts, 500,000 people estimated to have cancer risk ≥ 100-in-1 million
- 12 MSAs with tracts ≥ 100-in-1 million

National Average Cancer Risk

2014 NATA Version 2

(30-in-1 million)



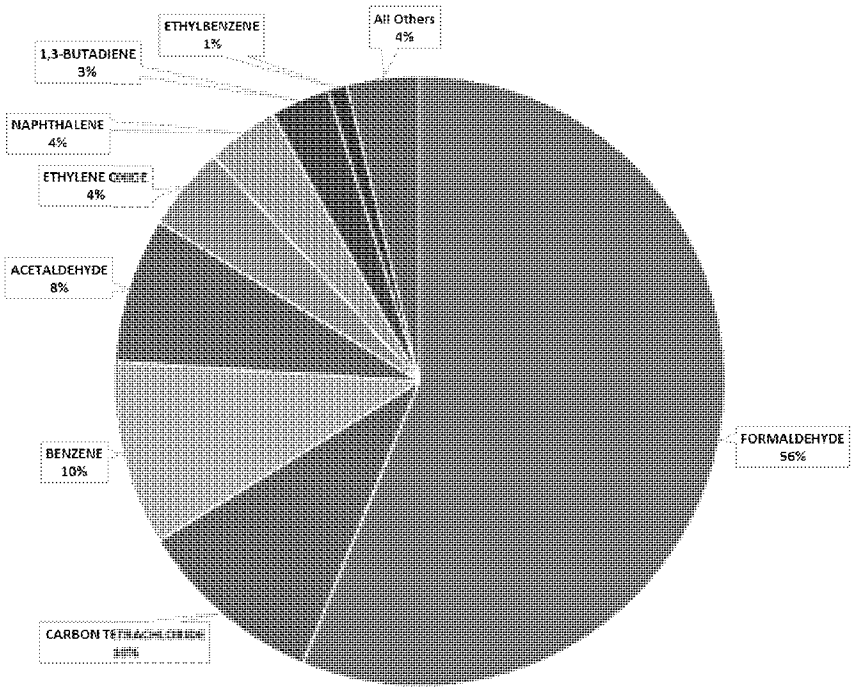
27

National Average Cancer Risk

2014 NATA Version 2

Pollutant Contributions (30-in-1 million)

Ethylene oxide (stationary source pollutant) is a new risk driver in 2014

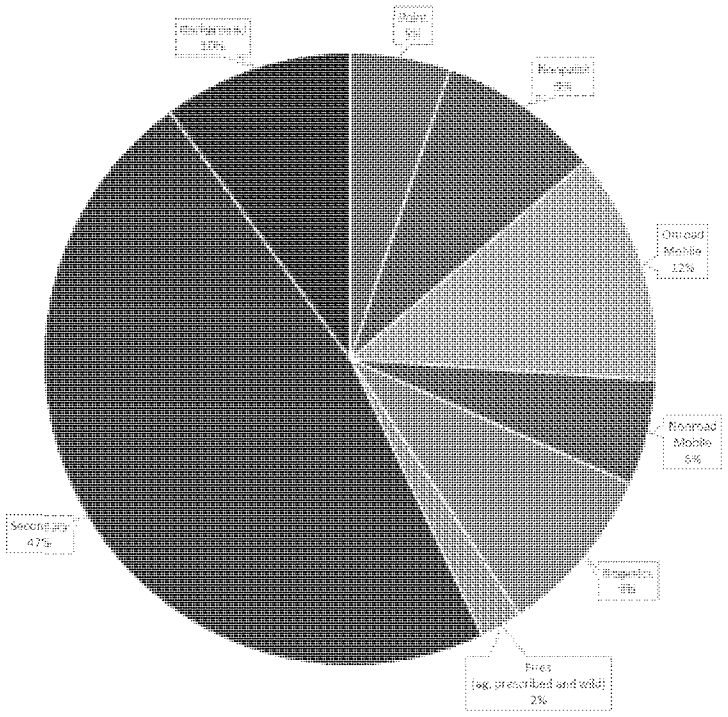


28

National Average Cancer Risk

2014 NATA Version 2

Source Contributions (30-in-1 million)



National Noncancer Risks

- Respiratory
  - National noncancer (respiratory) Hazard Index (HI) is estimated to be 0.4
    - HI is the sum of hazard quotients for individual pollutants
    - RfC > 1 indicates potential for noncancer health effects
  - 10 tracts and 29,000 people estimated to have a HI >1
  - Formaldehyde, acetaldehyde, and **acrolein** compose nearly 80 percent of the HI
  - Secondary formation accounts for about 50 percent of the HI

Ws 65000 tracts > 1 and 270 million people.

Appointment

From: Sasser, Erika [Sasser.Erika@epa.gov]
Sent: 5/22/2018 1:01:22 PM
To: Sasser, Erika [Sasser.Erika@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]; Seager, Cheryl [Seager.Cheryl@epa.gov]; Stenger, Wren [stenger.wren@epa.gov]; Gray, David [gray.david@epa.gov]; Vandenberg, John [Vandenberg.John@epa.gov]; Koerber, Mike [Koerber.Mike@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]
CC: Langdon, Robin [Langdon.Robin@epa.gov]; Wayland, Richard [Wayland.Richard@epa.gov]; Houyoux, Marc [Houyoux.Marc@epa.gov]; Verhalen, Frances [verhalen.frances@epa.gov]; McGee, Tomika [McGee.Tomika@epa.gov]; Donaldson, Guy [Donaldson.Guy@epa.gov]; Price, Lisa [Price.Lisa@epa.gov]; Parker, Cindy [parker.cindy@epa.gov]; Madden, Joshua [madden.joshua@epa.gov]; Larson, Darrin [Larson.Darrin@epa.gov]; Ahuja, Anupa [ahuja.anupa@epa.gov]; Taheri, Diane [Taheri.Diane@epa.gov]; Welton, Patricia [Welton.Patricia@epa.gov]; Chiang, I-Jung [chiang.i-jung@epa.gov]; Bokun, Lisa [Bokun.Lisa@epa.gov]; Harrison, Ben [Harrison.Ben@epa.gov]; Noonan, Jenny [Noonan.Jenny@epa.gov]

Subject: NATA Results Briefing for Region 6 - Room C501A - Phone Ex. 6 Personal Privacy (PP) Conference I.D. Ex. 6 Personal Privacy (PP) *ATTACHMENT*
Attachments: 2014 NATA Results Briefing for R6 staff.pptx
Location: RTP-OAQPS-C501A/RTP-OAQPS-BLDG-C

Start: 6/14/2018 7:00:00 PM
End: 6/14/2018 8:00:00 PM
Show Time As: Busy

Required Attendees: Sasser, Erika; Smith, Darcie; Palma, Ted; Strum, Madeleine; Bremer, Kristen; Seager, Cheryl; Stenger, Wren; Gray, David; Vandenberg, John; Koerber, Mike; Jones, Rhea
Optional Attendees: Langdon, Robin; Noonan, Jenny; Wayland, Richard; Houyoux, Marc; Verhalen, Frances; McGee, Tomika; Donaldson, Guy; Price, Lisa; Parker, Cindy; Madden, Joshua; Larson, Darrin; Ahuja, Anupa; Taheri, Diane; Welton, Patricia; Chiang, I-Jung; Bokun, Lisa; Harrison, Ben

---

→ Join Skype Meeting

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

Join by Phone
Toll number: Ex. 6 Personal Privacy (PP)
Find a local number

Conference ID: Ex. 6 Personal Privacy (PP)

Help

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 1/2/2018 2:54:06 PM
To: Thurman, James [Thurman.James@epa.gov]
CC: Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: How is the ethylene oxide run going?

Ex. 5 Deliberative Process (DP)

From: Thurman, James
Sent: Tuesday, January 2, 2018 9:16 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Here's the newest spreadsheet, comp_etox_new.xlsx. Facilities are sorted by descending percent differences between V1 and V2 concentrations. **Ex. 5 Deliberative Process (DP)** I'll look into it more. I've attached the older comparison as well.

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive
Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:57 AM
To: Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Ex. 5 Deliberative Process (DP)

From: Thurman, James
Sent: Tuesday, January 2, 2018 8:16 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

It includes the corrected IA facilities. We can do a quick look at the spreadsheet before sending to HEID. Maybe send to them later today or tomorrow?

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive

Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:09 AM
To: Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

That's great. Does that include the 2 iowa facilities? Should we send to HEID directly or do that comparison to v1 and look at it?

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Thurman, James
Sent: Tuesday, January 2, 2018 8:03 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Should have a spreadsheet to you this morning.

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive
Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:01 AM
To: Thurman, James <Thurman.James@epa.gov>
Subject: How is the ethylene oxide run going?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 12/7/2017 9:33:03 PM
To: Thurman, James [Thurman.James@epa.gov]
Subject: RE: etox results

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

State_or_Tribe	FIPS	County	EIS__Facility_ID	Facility_name	NAICS	NAICS_Description	emis_v1	emis_v2	c

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Thurman, James
Sent: Thursday, December 7, 2017 3:59 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: etox results

I've looked at the first 2. Ex. 5 Deliberative Process (DP)

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive
Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Thursday, December 07, 2017 3:57 PM
To: Thurman, James <Thurman.James@epa.gov>
Subject: RE: etox results

Ex. 5 Deliberative Process (DP)

From: Thurman, James
Sent: Thursday, December 7, 2017 3:30 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: etox results

Here's a spreadsheet of V1 concentrations vs. V2 concentrations with V1 and V2 emissions along with percent differences (v2-v1) of concentrations. I've sorted by descending difference and highlighted in yellow some of the high

ones. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive
Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 1/25/2018 11:15:01 PM
To: Thurman, James [Thurman.James@epa.gov]
Subject: RE: hybrid ratios for EtO from v1
Attachments: ETOX_v1_v2_highrisk_comparison.xlsx

Hi James

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Thurman, James
Sent: Thursday, January 25, 2018 4:03 PM
To: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: hybrid ratios for EtO from v1

Ex. 5 Deliberative Process (DP)

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive
Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Palma, Ted
Sent: Thursday, January 25, 2018 3:36 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: hybrid ratios for EtO from v1

I don't have but we could easily add those in to tract risks if James provides them by tract for EO
We were just going to footnote the table to say it is not in but if that data is handy it can be added so the final tract value is closer!
Ted

Ted Palma

USEPA
OAQPS/HEID/ATAG
MD C539-02
RTP, NC 27711

919-541-5470 (work)
palma.ted@epa.gov

From: Strum, Madeleine
Sent: Thursday, January 25, 2018 3:29 PM
To: Thurman, James <Thurman.James@epa.gov>; Palma, Ted <Palma.Ted@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: hybrid ratios for EtO from v1

Hi James and Ted

On the EtO Regional Office call Ted has offered to share with the Regions the tract level risk estimated by population weighting (no-hybrid) – Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Message

From: Houyoux, Marc [Houyoux.Marc@epa.gov]
Sent: 6/25/2018 9:26:12 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]
CC: Strum, Madeleine [Strum.Madeleine@epa.gov]
Subject: RE: scatter plot/historgram of EtO facilities/emissions
Attachments: 2014 NEI v2 EtO by facility .ge. 1 lb for HEID.xlsx

Importance: High

Darcie and Robin-

The data that you requested is attached. Please take a look at the Readme tab for some important notes.

Other data fields are available if needed.

I have added a few fields that you may fine helpful.

Two items of note:

Ex. 5 Deliberative Process (DP)

Marc

DELIBERATIVE FOR INTERNAL USE. DRAFT.

Marc Houyoux
Group Leader
Emissions Inventory and Analysis Group
EPA/OAQPS/AQAD
919-541-3649

From: Smith, Darcie
Sent: Monday, June 25, 2018 12:46 PM
To: Houyoux, Marc <Houyoux.Marc@epa.gov>; Langdon, Robin <Langdon.Robin@epa.gov>
Subject: FW: scatter plot/historgram of EtO facilities/emissions

Hi Marc –

Robin is going to call you to provide some additional context for this request.

Ex. 5 Deliberative Process (DP) Can we please have a file with a list of them? It will need to contain (and whatever else you think might be useful – scc code?):

- EIS ID

- Name
- Address
- State
- Region
- Emissions of EtO

This is needed as soon as possible, in order to provide additional information on the topic.

Thanks,
Darcie

Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Strum, Madeleine
Sent: Tuesday, June 19, 2018 8:32 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: scatter plot/historgram of EtO facilities/emissions

Darcie,

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Madeleine

From: Smith, Darcie
Sent: Tuesday, June 19, 2018 6:09 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: scatter plot/historgram of EtO facilities/emissions

Hi Madeleine –

Ex. 5 Deliberative Process (DP)

Thanks!

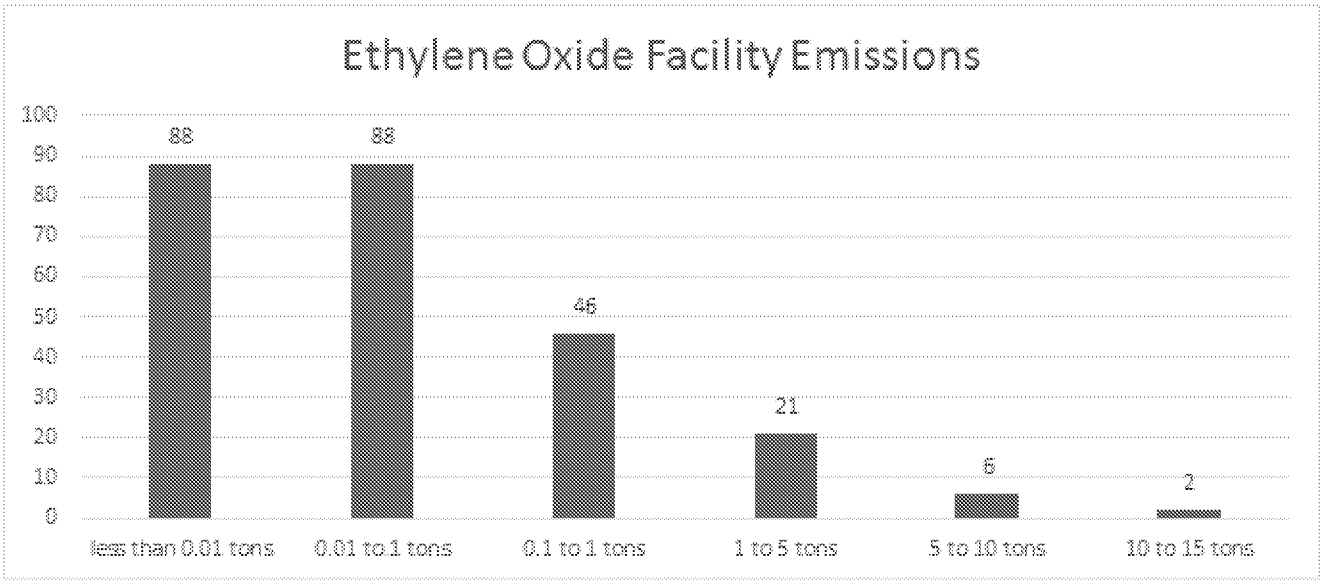
Darcie Smith
U.S. EPA/OAQPS/ATAG
919.541.2076
smith.darcie@epa.gov

From: Strum, Madeleine
Sent: Tuesday, June 12, 2018 7:39 PM

To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: scatter plot/historgram of EtO facilities/emissions

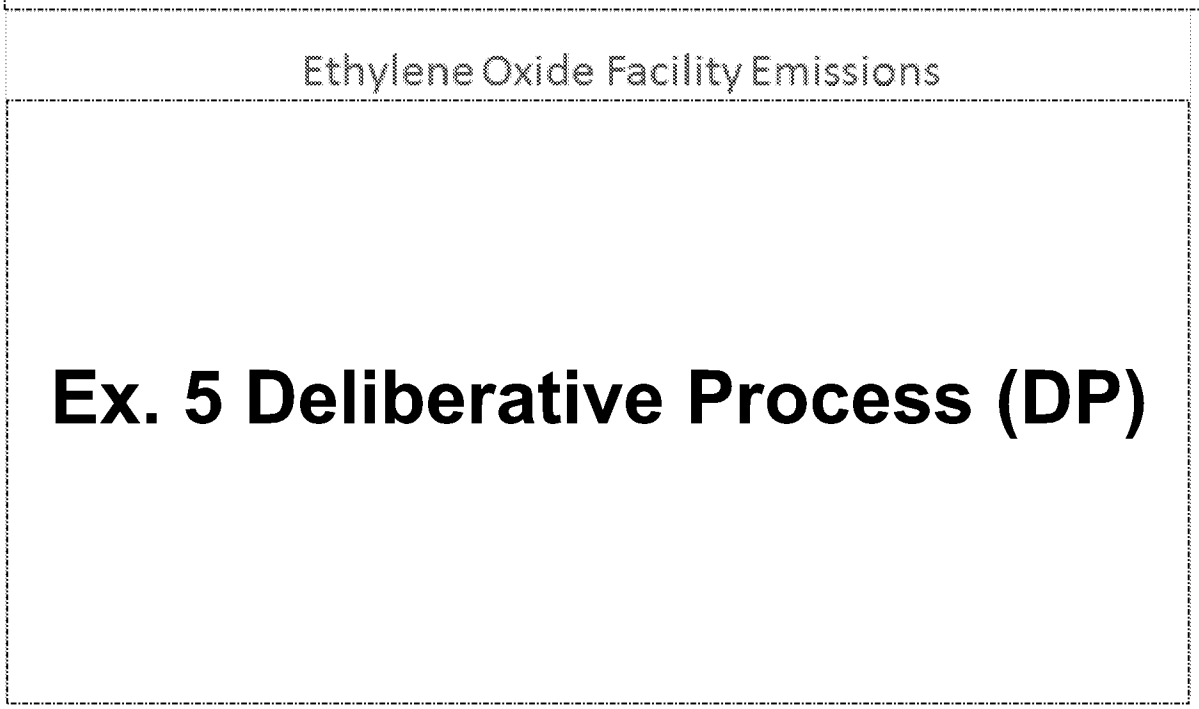
Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)



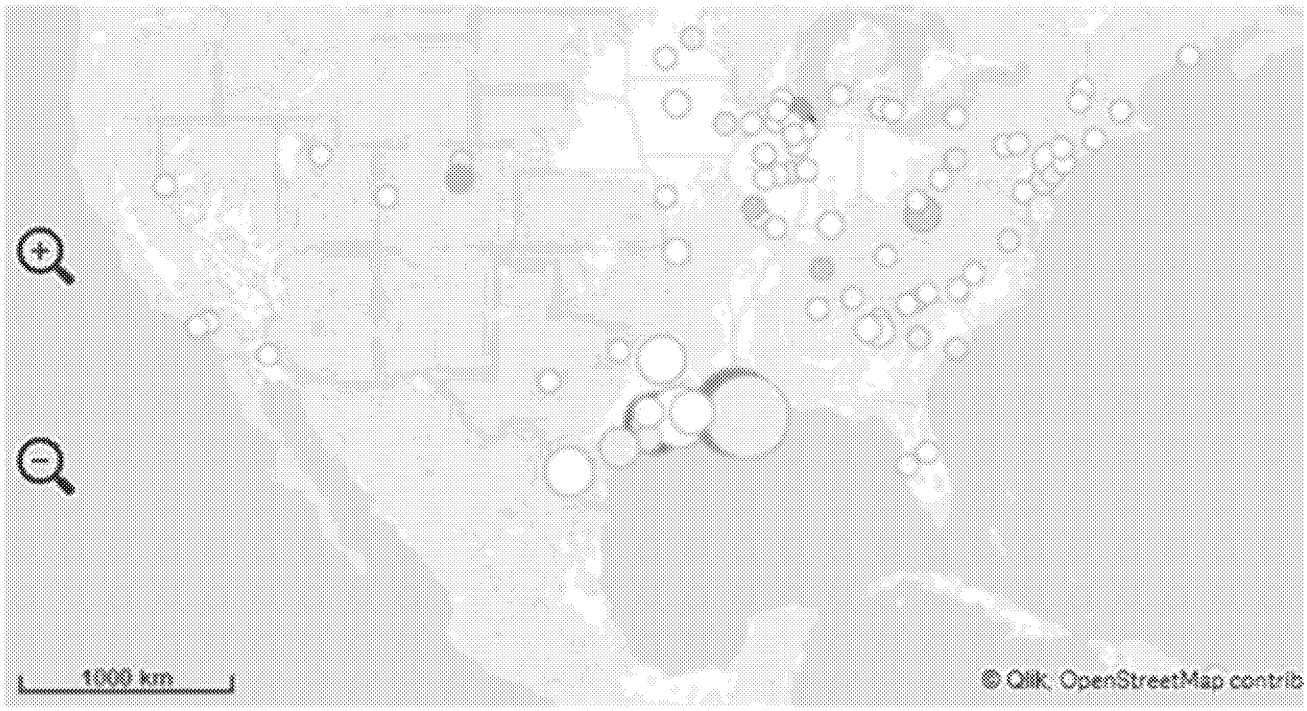
From: Strum, Madeleine
Sent: Tuesday, June 12, 2018 7:16 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>
Subject: RE: scatter plot/historgram of EtO facilities/emissions

Ex. 5 Deliberative Process (DP)



FYI here's what the story map (which is NOT public yet) shows (it has a 0.01 ton cut off and groups multiple sources into bubbles.

Ethylene Oxide



Point sources are clustered into 59km bubbles, select a bubble to zoom and view individual point sources

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 7/20/2018 3:13:52 AM
To: Thurman, James [Thurman.James@epa.gov]
Subject: EtO meeting tommorrow at 11am
Attachments: MASTER_ETOX_v1_v2_highrisk_comparison.xlsx

I see you are on the invite. Please let me know what happened since I can't go.

As background, we've been maintaining/updating a spreadsheet of EtO-emitting facilities with emissions (v1 and v2) and all sorts of other stuff . Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

File is here. Please remember that Excel is quirky in sharepoint so please check that you're the only one in there before you do a lot of work and are unable to save!

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 12/8/2017 1:56:55 AM
To: Beidler, James [Beidler.James@epa.gov]; Thurman, James [Thurman.James@epa.gov]
CC: Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: Nonroad AERMOD Helper Files -- Back to Point

Actually it shut in Aug 2017.

From: Strum, Madeleine
Sent: Thursday, December 7, 2017 5:20 PM
To: Beidler, James <Beidler.James@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: Nonroad AERMOD Helper Files -- Back to Point
Importance: High

On the first one -- Chun Yi said the changes she had made are more correct than v1 and this unit actually shut down in 2016. She doesn't care what we use however, so might as well leave it as is and bring it up to the team and see what everyone else wants to do.

---------- here is what Chun Yi got from the facility----------
Cheryl,

It was very nice to talk with you. I will use the following to summarize our effort on the review of 2014 emissions for ethylene oxide from the 3M - New Ulm - Electrical Products Division:

1. The originally reported emissions of EtO, 0.09 Tons, are right.
2. The emissions originally were reported for SCC 30800699. It should be for SCC 31502001.
3. The release of emissions was through 4 each ¾" copper lines housed within a 4.75"pipe running through the roof of the building, ~10 foot high. The exhaust velocity would be close to 0 due to the elbow in the release point (goose neck). The exhaust temperature is 131F.
4. 3M will shut down the operation in June 2017.

Please let me know if I missed anything. I really appreciate your help.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Strum, Madeleine
Sent: Thursday, December 7, 2017 4:39 PM
To: Beidler, James <Beidler.James@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: Nonroad AERMOD Helper Files -- Back to Point

We're going to have to focus back on POINT. WE got the EO modeling results and there are weird increases in concentrations. JT figured out the first one and he said the 2nd one moved by 600 m. I can check which lat/lon is more correct. We'll have to go through the others. So it isn't an emissions processing issue but rather some of the NATA

changes appear problematic. The one in Puerto Rico that I did is especially alarming because I thought the change would have caused risks to decrease.

I am not sure the best way to change the helper files but I will work on trying to fill in the fix (probably won't get to all by Monday) and then maybe we can figure it out.

State_or_Tribe	FIPS	County	EIS__Facility_ID	Facility_name	NAICS	NAICS_Description	emis_v1	emis_v2	c
Minnesota	27015	Brown	7837011	3M - New Ulm - Electrical Products Div	32551	Paint and Coating Manufacturing	0.09	0.09	0
Iowa	19079	Hamilton	5383511	VAN DIEST SUPPLY COMPANY	32532	Pesticide and Other Agricultural Chemical Manufacturing	1.27	1.27	0
Massachusetts	25027	Worcester	8142611	STERIS CORPORATION	561910	Packaging and Labeling Services	0.04	0.16	0
Puerto Rico	72011	Anasco	6982311	Edwards Lifesciences Corporation	339112	Surgical and Medical Instrument Manufacturing	0.79	0.69	0
Iowa	19113	Linn	7891211	PENFORD PRODUCTS CO	311221	Wet Corn Milling	0.26	0.26	0
Georgia	13013	Barrow	2812911	Stepan Co	325613	Surface Active Agent Manufacturing	0.38	0.38	0
Louisiana	22019	Calcasieu	8468011	Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex	325199	All Other Basic Organic Chemical Manufacturing	6.32	6.32	0
Louisiana	22005	Ascension	7445611	Shell Chemical LP - Geismar Plant	325110	Petrochemical Manufacturing	4.83	4.83	0

From: Beidler, James
Sent: Thursday, December 7, 2017 4:03 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: Nonroad AERMOD Helper Files

I have the NONRD12 run group helper files. The location file is QA'd if it is needed right now before I finish up the QA of the other helper files:
/work/EMIS/em_v7.2/2014platform/2014fd_nata_aermod/aermod/locations/NONRD12_locations.csv

I mentioned to Madeleine a note about the QA of the parameters: the vertices of the met grid cells are aligned with the 12km Lambert grid. The UTM cell vertices may not appear to be spaced 12km apart due to the differences in the projections. I'm going to put together a GIS plot of the lat/lons and the 2 projections to verify that they are aligned and space correctly because my automated checks give results that show differences ~1/2 km from the expected cell side lengths.

=====

James Beidler
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Science, Engineering, and Technology Solutions | office **(919) 200-7415**
beidler.james@epa.gov

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 12/8/2017 6:47:56 PM
To: Thurman, James [Thurman.James@epa.gov]; Beidler, James [Beidler.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: velocities/diameters/lat lons

There are 5 that have zero velocities at some release points. None overlap with the list of 22 facilities that have distances more than 5 meters from their FF10 lat lon.

facility_id	facility_name
7202911	Union Carbide Corp - St Charles Operatio
8468011	Sasol Chemicals (USA) LLC - Lake Charles
5520211	INEOS Oxide - A Division of INEOS Americ
8467311	The Dow Chemical Co - Louisiana Operatio
1440511	U.S. VETERANS AFFAIRS MEDICAL CENTER

One of the above (zero velocity) -Sasol- is on my DON'T KNOW WHY IT CHANGED list . So I suspect the zero velocity is why it changed.

I still don't know why Van Diest changed between v1 and v2 unless it is the change from FUG to POINTHOR.

Iowa	19079	Hamilton	5383511	VAN DIEST SUPPLY COMPANY	32532	Pesticide and Other Agricultural Chemical Manufacturing	1.27	1.27	0.058839594	0.36336531	517.55

Madeleine

From: Strum, Madeleine
Sent: Friday, December 8, 2017 1:27 PM
To: Thurman, James <Thurman.James@epa.gov>; Beidler, James <Beidler.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: velocities/diameters/lat lons

There are 22 EtO facilities to rerun if we want to correct the locations > 5 meters due to SMOKE changing the lat lons. I will also check if there are EtO facilities with 0 velocity or diameter and add it to this list of 22.

JB – James won't rerun today but we should work on the helper file so if we decide to rerun it will be ready Monday am.

JT – also would be useful to understand why risks changed where emissions didn't for the 2 I couldn't figure out.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Thurman, James
Sent: Friday, December 8, 2017 12:58 PM
To: Beidler, James <Beidler.James@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: velocities/diameters/lat lons

The AERMOD source code says that if exit velocity and diameter are less than 1e-05, the velocity and diameter are reset to 1e-05. I'll do a quick run to confirm

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Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Beidler, James
Sent: Friday, December 08, 2017 12:45 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Subject: RE: velocities/diameters/lat lons

The attached spreadsheet, pointv2_aermod_inven_locations_gt5, shows the sources with a UTM location difference > 5 m between the helper file location and the location calculated directly from the inventory lat/lon. This is just a subset of the complete spreadsheet, which is too large to include.

The other spreadsheet, pointv2_aermod_point_params, shows the stack parameters in the AERMOD helper files (aer) vs the inventory values (inv) in inventory units (ft, ft/s, etc.). There is some precision difference from calculating the AERMOD helper files back to the inventory units.
In cases where helper file velocity is zero the inventory velocity is < 0.016 ft/s. In general we only see large % diff in small values.

=====

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From: Strum, Madeleine
Sent: Friday, December 08, 2017 12:31 PM
To: Eyth, Alison <Eyth.Alison@epa.gov>; Beidler, James <Beidler.James@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Subject: velocities/diameters/lat lons

JB says the max lat lon difference is 10 meters. JT and I think that is not worth rerunning. Do you all agree?

On the rounding I think only the zeroes are the issue. JB will compare the real velocities with the 0 and we can see if we want to rerun them. We should do the same with the diameters. I can see if any zero velocities are ethylene oxide facilities.

JT: can you check on whether AERMOD will change a 0 velocity to some minimum number? Same for 0 diameter?
JT will also see if he can determine why v1 and v2 conc are different for the ones I couldn't figure out.

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Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 12/8/2017 6:27:46 PM
To: Thurman, James [Thurman.James@epa.gov]; Beidler, James [Beidler.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: velocities/diameters/lat lons
Attachments: Copy of pointv2_aermod_inven_locations_gt5.xlsx

There are 22 EtO facilities to rerun if we want to correct the locations > 5 meters due to SMOKE changing the lat lons. I will also check if there are EtO facilities with 0 velocity or diameter and add it to this list of 22.

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JT will also see if he can determine why v1 and v2 conc are different for the ones I couldn't figure out.

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Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 1/5/2018 6:43:43 PM
To: Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: How is the ethylene oxide run going?
Attachments: v1concs.zip

Well I couldn't write the logic to choose the concentration where there the poll doesn't have (or has a 0) cancer risk but has noncancer resp and where it doesn't have noncancer resp where it has noncancer neuro -- so there are 3 concentrations. "conc_can","conc_neurov1","conc_respv1"

I found somewhat lack of consistency (cancer pollutants with nonzero emissions and"conc_can" = 0 but nonzero noncancer risk in a few situation) but I think for this quick check if you want a conc just use cancer risk first, if it there is none or if it is 0 use noncancer resp and if there is neither then use noncancer neuro.

Some polls have no health benchmarks so you wouldn't be able to compute a concentration for them.

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From: Thurman, James
Sent: Friday, January 5, 2018 9:56 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Oh, if you can do it in an hour, that would be great. That would save me some time.

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Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Thursday, January 04, 2018 2:50 PM
To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Ok, let me know if you change your mind. I could do it in about an hour.

From: Thurman, James
Sent: Thursday, January 4, 2018 2:48 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

I should be able to do the conversions.

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Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Thursday, January 04, 2018 12:49 PM
To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

James

1st file has v1 max facility risk (cancer, resp and neuro) by facility and pollutant.
2nd file has the benchmarks to convert risk to concentration.

I think you already have a program to do that but if you want me to merge the benchmarks and compute the concentrations and put it in the first file I can do it. Let me know.

The formula is cancer risk/cancerbenchmark (column D) = v1 concentration
If cancer risk benchmark is dividebyzero then we could either use noncancer risk/noncancerbenchmark (column E) = v1 concentration
Or just do the v1/v2 concentration comparison for the cancer pollutants.

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From: Thurman, James
Sent: Thursday, January 4, 2018 11:01 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

I can do that.

James A. Thurman, Ph.D.
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Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Thursday, January 04, 2018 10:59 AM

To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Ok. I can send you it by pollutant/facility – it is very large. Would it be possible for you to include the source id of the max risk? That will help us focus on which source to look at if we wanted to explore the release parameters (for situations in which total emissions haven't changed but risks did).

From: Thurman, James
Sent: Thursday, January 4, 2018 10:54 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Madeleine,
If you can send me that spreadsheet of max risk by facility and we back out the concentrations for all pollutants, or at least the risk drivers, I should be able to do it.

James

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
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Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Wednesday, January 03, 2018 5:13 PM
To: Eyth, Alison <Eyth.Alison@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Subject: RE: How is the ethylene oxide run going?

So I thought a comparison was also a good idea and we did it for EtO and in a very roundabout way, it caused me to find my Iowa error. We also saw the impacts of receptor changes and release parameter changes. The question is do we do it for the other pollutants/rest of the facilities.

For the 2nd round of EtO, I didn't do a comparison other than to see that one I thought would be lowered due to the helper file rounding/lat lon issues was in fact even higher (but not significantly).

So we can do a comparison for all facilities but do you think we should be taking time to look at them before sending to HEID and if not, maybe we just wait for the risk results and compare those?

James are you set up to do a comparison like the one you did for EtO (max receptor concentration)?

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From: Eyth, Alison
Sent: Wednesday, January 3, 2018 4:34 PM

To: Thurman, James <Thurman.James@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Hi,

We ran out of time today. I was wondering if it makes sense to do a comparison of the rest of the point sources particularly to be made aware of those that have increased since v1?

Alison

From: Thurman, James
Sent: Tuesday, January 02, 2018 9:16 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Here's the newest spreadsheet, comp_etox_new.xlsx. Facilities are sorted by descending percent differences between V1 and V2 concentrations. The Sasol facility didn't change much from the previous V2 run. I'll look into it more. I've attached the older comparison as well.

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Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:57 AM
To: Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

I think a quick look. As long as the values (other than the 2 Iowa) are close to what we had before we are good to go.

From: Thurman, James
Sent: Tuesday, January 2, 2018 8:16 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

It includes the corrected IA facilities. We can do a quick look at the spreadsheet before sending to HEID. Maybe send to them later today or tomorrow?

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Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:09 AM
To: Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

That's great. Does that include the 2 iowa facilities? Should we send to HEID directly or do that comparison to v1 and look at it?
Should look somewhat like the previous except the Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex should be closer to the v1 value.

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From: Thurman, James
Sent: Tuesday, January 2, 2018 8:03 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Should have a spreadsheet to you this morning.

James A. Thurman, Ph.D.
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Phone: (919) 541-2703
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Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:01 AM
To: Thurman, James <Thurman.James@epa.gov>
Subject: How is the ethylene oxide run going?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 1/5/2018 9:11:38 PM
To: Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: How is the ethylene oxide run going?
Attachments: v1concs2.zip

I figured it out. The field name "a" has the final concentration.

From: Strum, Madeleine
Sent: Friday, January 5, 2018 1:39 PM
To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Well I couldn't write the logic to choose the concentration where there the poll doesn't have (or has a 0) cancer risk but has noncancer resp and where it doesn't have noncancer resp where it has noncancer neuro -- so there are 3 concentrations. "conc_can","conc_neurov1","conc_respv1"

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From: Thurman, James
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To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Oh, if you can do it in an hour, that would be great. That would save me some time.

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From: Strum, Madeleine
Sent: Thursday, January 04, 2018 2:50 PM
To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Ok, let me know if you change your mind. I could do it in about an hour.

From: Thurman, James
Sent: Thursday, January 4, 2018 2:48 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

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To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

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To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

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Subject: RE: How is the ethylene oxide run going?

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James

James A. Thurman, Ph.D.
U.S. EPA/OAQPS/AQAD
Air Quality Modeling Group (C439-01)
109 T.W. Alexander Drive
Research Triangle Park, NC 27711
Phone: (919) 541-2703
Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Wednesday, January 03, 2018 5:13 PM
To: Eyth, Alison <Eyth.Alison@epa.gov>; Thurman, James <Thurman.James@epa.gov>
Subject: RE: How is the ethylene oxide run going?

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So we can do a comparison for all facilities but do you think we should be taking time to look at them before sending to HEID and if not, maybe we just wait for the risk results and compare those?

James are you set up to do a comparison like the one you did for EtO (max receptor concentration)?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Eyth, Alison
Sent: Wednesday, January 3, 2018 4:34 PM
To: Thurman, James <Thurman.James@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Hi,

We ran out of time today. I was wondering if it makes sense to do a comparison of the rest of the point sources particularly to be made aware of those that have increased since v1?

Alison

From: Thurman, James
Sent: Tuesday, January 02, 2018 9:16 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

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From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:57 AM
To: Thurman, James <Thurman.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

I think a quick look. As long as the values (other than the 2 Iowa) are close to what we had before we are good to go.

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From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:09 AM
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Should look somewhat like the previous except the Sasol Chemicals (USA) LLC - Lake Charles Chemical Complex should be closer to the v1 value.

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From: Thurman, James
Sent: Tuesday, January 2, 2018 8:03 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Should have a spreadsheet to you this morning.

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From: Strum, Madeleine
Sent: Tuesday, January 02, 2018 8:01 AM
To: Thurman, James <Thurman.James@epa.gov>
Subject: How is the ethylene oxide run going?

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 1/4/2018 5:48:56 PM
To: Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]
Subject: RE: How is the ethylene oxide run going?
Attachments: allV1_View2_Table.zip; benchmarks_basedon_v17pollinfosheet.xlsx

James

1st file has v1 max facility risk (cancer, resp and neuro) by facility and pollutant.
2nd file has the benchmarks to convert risk to concentration.

I think you already have a program to do that but if you want me to merge the benchmarks and compute the concentrations and put it in the first file I can do it. Let me know.

The formula is cancer risk/cancerbenchmark (column D) = v1 concentration
If cancer risk benchmark is dividebyzero then we could either use noncancer risk/noncancerbenchmark (column E) = v1 concentration
Or just do the v1/v2 concentration comparison for the cancer pollutants.

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Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Thurman, James
Sent: Thursday, January 4, 2018 11:01 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

I can do that.

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Fax: (919) 541-0044
Email: thurman.james@epa.gov

From: Strum, Madeleine
Sent: Thursday, January 04, 2018 10:59 AM
To: Thurman, James <Thurman.James@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Ok. I can send you it by pollutant/facility – it is very large. Would it be possible for you to include the source id of the max risk? That will help us focus on which source to look at if we wanted to explore the release parameters (for situations in which total emissions haven't changed but risks did).

From: Thurman, James
Sent: Thursday, January 4, 2018 10:54 AM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>; Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: How is the ethylene oxide run going?

Madeleine,
If you can send me that spreadsheet of max risk by facility and we back out the concentrations for all pollutants, or at least the risk drivers, I should be able to do it.

James

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Message

From: Thurman, James [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=AFBCBF8AC44B43329A71AAD61EB535D5-JTHURMAN]
Sent: 12/7/2017 8:30:27 PM
To: Strum, Madeleine [Strum.Madeleine@epa.gov]
Subject: etox results
Attachments: comp_etox.xlsx

Here's a spreadsheet of V1 concentrations vs. V2 concentrations with V1 and V2 emissions along with percent differences (v2-v1) of concentrations. I've sorted by descending difference and highlighted in yellow some of the high ones. The first row is so different because the ETOX stack at the facility had changes in stack parameters. The stack height went from 10 m to 3 m Stack temperature decreased from 351 to 328 K, velocity from 7.28 m/s to 0.24 m/s and diameter from 0.51 to 0.12 m. I'm looking at the others as well but wanted to go ahead and send to you.

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Email: thurman.james@epa.gov

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 5/17/2017 8:05:49 PM
To: Phillips, Sharon [Phillips.Sharon@epa.gov]; Shelow, David [Shelow.David@epa.gov]; Scheffe, Rich [Scheffe.Rich@epa.gov]; Mannshardt, Elizabeth [Mannshardt.Elizabeth@epa.gov]; Thurman, James [Thurman.James@epa.gov]; Merrill, Raymond [Merrill.Raymond@epa.gov]; Drukenbrod, Josh [Drukenbrod.Josh@epa.gov]; RTP-OAQPS-919-541-4248-AQAD/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS-919-541-4248-AQAD@epa.gov]
Subject: RE: AQAD Air Toxics Team - follow up items
Attachments: E-trends-toxics-NOAAlink-test_17May2017.docx; Copy of Priorty Facility List 17May17 V3.xlsx; AQADHEIDBrainstormToxicsDetailMay172017.docx

Follow up – Action items from today's meeting

1. E-trends write up of NOAA data (see attached). The idea is to access the write up from a link below the tile plot
2. Tile plot questions
    a. Why is tile plot N/A for 1,3 butadiene in Atlanta GA?: due to non-detects
    b. Why does tile plot show increases in manganese in VT? – manganese annual averages increase from around 0.001 ug/m3 (2004 thru 2009) and then at 2010 shoot up to 0.002 and hover at that level through 2015. Data are nearly all above MDL (and there are no non-detects).
    c. Comments from team on tile plot were provided to Arthur Zuco who replied via email earlier today.
3. List of facilities that are (v1 NATA) causing v1 high tract risks is attached. Most are NOT hospitals using ethylene oxide but there are some on the list. Filter column AB on "Ethylene Oxide" and 43 of them are Ethylene Oxide emitting facilities. These 43 facilities include chemical plants, hospitals (less than 10 of them) and commercial sterilizers. We've not yet gotten all the emissions changes, but I did get (and didn't yet mark) a significant emissions change (lower emissions) for one of the hospitals – Montefiore in the Bronx.
4. Elizabeth (in an email she sent earlier today) provided the write-up for a 6-month HEID detail to our division (working with our team) to pursue air toxics data being used in Google Earth Engine/ other areas. For your convenience I attach it here (3rd attachment). She also sent links to learn more about the Google Earth Engine:

    "GEE: The main page has a 2 minute generic intro video: https://earthengine.google.com/ and then I liked this real-live nerdy-scientist guy talking about how it works (i.e., how we might use it): https://developers.google.com/earth-engine/ (3 minutes)
    When GEE team members came to EPA in March, we met with Karin and Nick: http://earthenginesummit2015.earthoutreach.org/speaker-bios. "

Let me know if I missed anything

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 11/22/2017 1:27:18 AM
To: Thurman, James [Thurman.James@epa.gov]
CC: Beidler, James [Beidler.James@epa.gov]
Subject: FW: ethylene oxide pollutant code for requested facility list
Attachments: 2014fd_etox_summary.xlsx

Hi James

The list is of EtO sources and facilities is attached. I did and independent check in EIS and it is correct.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

From: Beidler, James
Sent: Tuesday, November 21, 2017 12:14 PM
To: Strum, Madeleine <Strum.Madeleine@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: RE: ethylene oxide pollutant code for requested facility list

Madeleine,

The summary for ETOX by both source and facility ID is attached.

=====

James Beidler
CSC Government Solutions LLC, a CSRA company
4401 Building, 79 T.W. Alexander Drive, Research Triangle Park, NC 27709
Science, Engineering, and Technology Solutions | office **(919) 200-7415**
beidler.james@epa.gov

From: Strum, Madeleine
Sent: Monday, November 13, 2017 6:53 PM
To: Beidler, James <Beidler.James@epa.gov>
Cc: Eyth, Alison <Eyth.Alison@epa.gov>
Subject: ethylene oxide pollutant code for requested facility list

Hi James
I requested a list of facilities (EIS ID) covered by the helper files (after you are done with the helper files) that emit ethylene oxide.
Pollutant code is below

75218	Ethylene Oxide

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711

Message

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 1/25/2017 12:14:44 PM
To: Lancey, Susan [lancey.susan@epa.gov]; Gross-Davis, CarolAnn [Gross-Davis.CarolAnn@epa.gov]; Bellizzi, Carol [Bellizzi.Carol@epa.gov]; Chow, Alice [chow.alice@epa.gov]; Louis, Egide [Louis.Egide@epa.gov]; King, Suzanne [king.suzanne@epa.gov]; Nwia, Jacqueline [nwia.jacqueline@epa.gov]; Cain, Alexis [cain.alexis@epa.gov]; Brown, Steven [Brown.Steven@epa.gov]; Doolan, Stephanie [Doolan.Stephanie@epa.gov]; Johnson, Karen T. [Johnson.Karent@epa.gov]; Olson, Kyle [Olson.Kyle@epa.gov]; Davidson, Ken [Davidson.Ken@epa.gov]; Narvaez, Madonna [Narvaez.Madonna@epa.gov]; Wroble, Julie [Wroble.Julie@epa.gov]; Fry, Jessica [fry.jessica@epa.gov]; Forde, Raymond [Forde.Raymond@epa.gov]; Smuts, MaryBeth [Smuts.Marybeth@epa.gov]; Sieffert, Margaret [Sieffert.Margaret@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]; Lutz, Craig [Lutz.Craig@epa.gov]; RTP-OAQPS-919-541-4154-AQAD/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS-919-541-4154-AQAD@epa.gov]; jeff.myers@wisconsin.gov [Jeff.Myers@wisconsin.gov]; Senthil, Velu [Senthil.Velu@epa.gov]
CC: Phillips, Sharon [Phillips.Sharon@epa.gov]; Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: NATA Regional Office Meeting 1/24/2017 follow up
Attachments: OtherHiRiskEndpoints_cbR2_Copy of NATA 2014 Point max risk and hi Comparison File Summary 012317.xlsx

Thanks NATA Regional leads for sharing information on the NATA facility review. A lot of effort and progress is underway. In addition to what was presented, I also recall Kyle (Region 8) working with some Tribes (who have worked on the review) and Stephanie (Region 7) helping Iowa.

Please continue your efforts to focus on the check list. Once we get the announcement reviewed and the data posted, I will send out an email about (Agenda item 2b) the additional facilities to be added to the checklist (~50 facilities) due to the change in ethylene oxide URE and updated modeling (MET data).

Two follow up items:

1) TRI list of facilities that we're asking for assistance from Velu Senthil of the TRI program is at https://usepa.sharepoint.com/sites/oar_Work/NATAREVIEW/DOCUMENTS/Forms/AllItems.aspx Feel free to add facilities to the list or send them to me to add.
2) **Ex. 5 Deliberative Process (DP)**

As always, feel free to call me or Ted for questions/further discussion.

Madeleine Strum | U.S. Environmental Protection Agency | 109 TW Alexander Drive, RTP, NC 27711
Office of Air Quality Planning and Standards | Air Quality Assessment Division | Emission Inventory and Analysis Group | 919 541 2383

Mailing Address: US EPA OAQPS (C339-02)/ RTP, NC 27711

From: Bellizzi, Carol
Sent: Tuesday, January 24, 2017 4:43 PM
To: Palma, Ted <Palma.Ted@epa.gov>; Strum, Madeleine <Strum.Madeleine@epa.gov>
Subject: Other endpoints- follow-up from today's call

Ted, Madeleine,

Ex. 5 Deliberative Process (DP)

Please feel free to share the table in any way if useful.

Thanks.
Carol

Appointment

From: Strum, Madeleine [Strum.Madeleine@epa.gov]
Sent: 12/6/2016 12:50:01 PM
To: Strum, Madeleine [Strum.Madeleine@epa.gov]; Lancey, Susan [lancey.susan@epa.gov]; Gross-Davis, CarolAnn [Gross-Davis.CarolAnn@epa.gov]; Bellizzi, Carol [Bellizzi.Carol@epa.gov]; Chow, Alice [chow.alice@epa.gov]; Louis, Egide [Louis.Egide@epa.gov]; King, Suzanne [king.suzanne@epa.gov]; Nwia, Jacqueline [nwia.jacqueline@epa.gov]; Cain, Alexis [cain.alexis@epa.gov]; Brown, Steven [Brown.Steven@epa.gov]; Doolan, Stephanie [Doolan.Stephanie@epa.gov]; Johnson, Karen T. [Johnson.Karent@epa.gov]; Olson, Kyle [Olson.Kyle@epa.gov]; Davidson, Ken [Davidson.Ken@epa.gov]; Narvaez, Madonna [Narvaez.Madonna@epa.gov]; Wroble, Julie [Wroble.Julie@epa.gov]; Fry, Jessica [fry.jessica@epa.gov]; Forde, Raymond [Forde.Raymond@epa.gov]; Smuts, MaryBeth [Smuts.Marybeth@epa.gov]; Sieffert, Margaret [Sieffert.Margaret@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]; Lutz, Craig [lutz.craig@epa.gov]; RTP-OAQPS-Ex. 6 Personal Privacy (PP) Ex. 6 Personal Privacy (PP) AQAD/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD@epa.gov]; jeff.myers@wisconsin.gov [Jeff.Myers@wisconsin.gov]
CC: Phillips, Sharon [Phillips.Sharon@epa.gov]; Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]

Subject: 2014 NATA meeting --- NATA Regional Leads
Attachments: Point Source Model Update v4.docx; NATA 2014 Point max risk and hi Comparison File Summary 012317.xlsx
Location: RTP-OAQPS-Ex. 6 Personal Privacy (PP) -AQAD/Phone-Line/RTP-OAQPS-BLDG-C <RTP-OAQPS-Ex. 6 Personal Privacy (PP) -AQAD@epa.gov>

Start: 1/24/2017 8:00:00 PM
End: 1/24/2017 9:00:00 PM
Show Time As: Tentative

Required Attendees: Lancey, Susan; Gross-Davis, CarolAnn; Bellizzi, Carol; Chow, Alice; Louis, Egide; King, Suzanne; Nwia, Jacqueline; Cain, Alexis; Brown, Steven; Doolan, Stephanie; Johnson, Karen T.; Olson, Kyle; Davidson, Ken; Narvaez, Madonna; Wroble, Julie; Fry, Jessica; Forde, Raymond; Smuts, MaryBeth; Margaret Sieffert; Palma, Ted; Morris, Mark; Lutz, Craig; RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD/Phone-Line/RTP-OAQPS-BLDG-C; Myers, Jeff D - DNR
Optional Attendees: Phillips, Sharon; Thurman, James; Eyth, Alison; Smith, Darcie

Agenda

1. NATA facility risk update
    a. Correction to process change sheets (emissions needed to be summed to process level where there were multiple release points per process)- I posted corrected change sheets. This didn't impact any agency that has already provided comments (I checked) so no re-work needed.
    b. Updated modeling of v1 point sources and URE change for ethylene oxide results (see attached files)— PLEASE DONT SEND THESE ATTACHMENTS OUT – WERE STILL WORKING ON THE NOTE AND WOULD LIKE YOUR FEEDBACK AS WELL. No re-work on what has already been reviewed, the impact is that some agencies will have additional facilities to review.
2. Status of NATA Review – below table indicates S/L/T that have started or are done
3. Observations/findings from your/ or your S/L/T reviews
4. How to get comments by deadline; particularly for highest priority facilities – those that are on the SharePoint checklist – and that will be appended (MIR>100 in a million or HI >5)

Here's some information about S/L/T that have provided changes/filled in the checklist or that have been working on it.

State or Tribe	# of facilities on Original (September) Checklist	Count of State Reviewed Data?	done or activity by S/L/T?	SLT Done but additional facilities need review

Alabama	13		Jefferson county provided lat lon changes but didn't fill out check list	1 Additional facility in Jefferson County Others maybe in Alabama
Alaska	1		DONE-no facilities meet checklist threshold	
Arizona	3			
Arkansas	9			
California	33			
Colorado	7			
Connecticut	1			
Florida	15			
Georgia	4			
Idaho	3	3	DONE - ID reviewed all 3, had no data changes, but nothing higher than 2011 NATA	
Illinois	7	7		8 facilities newly greater than 100. In addition, 1 facility from 200 to 480 (were no changes for that facility, and in 2011 it was 1).
Indiana	9		INDEM submitted changes for 2 of the 9 facilities on the checklist but didn't fill out the checklist.	2 facilities newly greater than 100 - one was on checklist already due to noncancer.
Iowa	8		Iowa has been analyzing and emailed 1 change (2015 emissions were a lot lower than 2014 TRI)	3 facilities newly greater than 100.
Kansas	13			

Kentucky	12	1	1 of 2 Jefferson county facilities were checked. The one that wasn't checked is from TRI. Madeleine added to TRI list. No KY facilities were checked.	
Louisiana	7			
Maine	2			
Maryland	1			
Massachusetts	1		Working on it (TRI source) but not yet done.	
Michigan	13			
Minnesota	10			
Mississippi	14			
Missouri	10			
Montana	3			
Nebraska	11			
Nevada	1			
New Jersey	5			
New Mexico	1			
New York	3			
Nez Perce Tribe of Idaho	1	1	DONE	
North Carolina	18			
Ohio	24	1	miami county (39109) is done.	
Oklahoma	22			
Oregon	5	5	DONE-see comment	may want to re-look at facility which went to 233
Pennsylvania	38			
South Carolina	18			
Southern Ute Indian Tribe	1	1	see comment	1additional checklist facility: has respiratory HI > 5.
Tennessee	11	1		Knox county has 1 more facility to review –

				respiratory HI just over 5. State of TN hasn't looked at anything yet so didn't tally the additional ones.
Texas	29			
Utah	3			
Vermont	1			
Virginia	3			
Washington	5			
West Virginia	6			
Wisconsin	8			
Wyoming	5			

Appointment

To: Strum, Madeleine [Strum.Madeleine@epa.gov]; Fox, Tyler [Fox.Tyler@epa.gov]; Houyoux, Marc [Houyoux.Marc@epa.gov]; Phillips, Sharon [Phillips.Sharon@epa.gov]; Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]; RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD@epa.gov]

Location: RTP-OAQPS-C335I/RTP-OAQPS-BLDG-C

Start: 8/7/2018 4:00:00 PM
End: 8/7/2018 4:30:00 PM
Show Time As: Busy

Recurrence: (none)

Draft Agenda

1. Kelly will provide NATA roll out update to Marc and Tyler since Marc, Tyler and Darcie are unable to attend Thursday NATA GL meeting.
2. On Friday HEID, SPPD, AQAD (Ned) – developed list following Regional feedback on criteria on prong 1 of Next steps on EtO approach
3. Region 8 facility on list – lat lons off by 300 meters or so. Remodeled AERMOD (seems like it will still be high) did not redo hybrid.
4. TRI getting 0 emissions reported for 2017 TRI by sterilizers that think they were never subject to TRI reporting so are stopping their reporting now.
5. Post modeling change for the solvent EtO emissions will be done after SLT preview
6. Model eval in progress
7. FY19 NATA budget – did not work out with larger team at this point
    a. 215 for processing emissions for CMAQ sensitivity, AERMOD point, and CMAQ&AERMOD final and tool updates
    b. Still gathering nonCONUS MET info and CMAQ runs (will be more due to nonCONUS testing/implementation)

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Help

Appointment

To: RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD@epa.gov]; Strum, Madeleine [Strum.Madeleine@epa.gov]; Diem, Art [Diem.Art@epa.gov]; Fox, Tyler [Fox.Tyler@epa.gov]; Houyoux, Marc [Houyoux.Marc@epa.gov]; Phillips, Sharon [Phillips.Sharon@epa.gov]; Thurman, James [Thurman.James@epa.gov]; Eyth, Alison [Eyth.Alison@epa.gov]; Vukovich, Jeffrey [Vukovich.Jeffrey@epa.gov]; Farkas, Caroline [farkas.caroline@epa.gov]; RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD/Phone-Line/RTP-OAQPS-BLDG-C [RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD@epa.gov]

Start: 1/14/2020 4:00:00 PM
End: 1/14/2020 4:30:00 PM

Recurrence: (none)

Required Attendees: Diem, Art; Fox, Tyler; Houyoux, Marc; Phillips, Sharon; Thurman, James; Eyth, Alison; Vukovich, Jeffrey; Farkas, Caroline; RTP-OAQPS-Ex. 6 Personal Privacy (PP) AQAD/Phone-Line/RTP-OAQPS-BLDG-C

Agenda for 1/14 – I will call in. CALL IN NUMBER UPDATED TO Ex. 6 Personal Privacy (PP)

1. **Status of AQAD point modeling.**

Ex. 5 Deliberative Process (DP)

2. **Status of RTR whole facility HEM modeling with public version of NEI (HEID)**
   a. HEID finished the modeling and is analyzing high risk facilities for census block location issues

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

3. **EtO sterilizer emissions work (SPPD)**
   a. Section 114 due Feb 6 and comments on ANPRM (modeling file) due Feb 10

Ex. 5 Deliberative Process (DP)

4. **Other**

Ex. 5 Deliberative Process (DP)

Join online meeting

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Join by Phone

Ex. 6 Personal Privacy (PP) (Dial-in Number) English (United States)

Find local number

Conference ID: Ex. 6 Personal Privacy (PP)

Help

Message

From: Witt, Jon [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=EA00BC6F645B438682026A77A8D4267C-WITT, JONAT]
Sent: 7/18/2018 2:58:19 PM
To: Shappley, Ned [Shappley.Ned@epa.gov]; Dewees, Jason [Dewees.Jason@epa.gov]
Subject: RE: Discuss EO sterilizer facilities, controls, and testing/monitoring options
Attachments: EOSterilizers_Top20.xlsx

Top 20 highest risk EO sterilizer facilities attached

-----Original Appointment-----
From: Witt, Jon
Sent: Wednesday, July 18, 2018 10:12 AM
To: Witt, Jon; Shappley, Ned; Dewees, Jason
Subject: Discuss EO sterilizer facilities, controls, and testing/monitoring options
When: Thursday, July 19, 2018 9:30 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).
Where: RTP-OAQPS-E141B/RTP-OAQPS-BLDG-E

Let me know if this time doesn't work. I'll send out some data before the meeting on the top 20 highest risk facilities and current controls. Feel free to invite others as needed.
Jonathan

Message

From: Hirtz, James [Hirtz.James@epa.gov]
Sent: 7/19/2018 5:26:23 PM
To: Smith, Darcie [Smith.Darcie@epa.gov]
CC: Langdon, Robin [Langdon.Robin@epa.gov]
Subject: Ethylene Oxide - RSEI data
Attachments: Facility_List_v3.xlsx

Darcie

Here is a data download from RSEI with TRI data, I was not able to pull any FRS ID information in from the web-site (TRI). Let me know if you need me to go over the file with you. I also pulled how the air emissions were derived for EO, ie by measurements, mass balance, emission factors, or other methods. Gives you an idea in regards to quality of the data used

Jim x0881

Message

From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 7/26/2018 2:25:14 PM
To: Riha, Kristin [Riha.Kristin@epa.gov]
CC: Palma, Ted [Palma.Ted@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]
Subject: EtO sources and risks near tribal areas
Attachments: Tribes Near EtO Emitters.xlsx; Tribal_Tracts_Risks.xlsx

Hey, I looked at all EtO point source emitters (no emissions cutoff) and found the nearest tribal boundary to each source. The attached file, "Tribes Near EtO Emitters", gives each facility and the nearest tribal boundary (in meters), sorted by increasing distance (zero distance indicates the facility is within the boundaries). There are 654 sources nationwide, but some are very low emitters. There are only 5 emitters within tribal boundaries. Overall, the median distance is about 60 km (37 miles). Some of the emissions are so low that they can be ignored. I highlighted in red those emissions that exceed a screening level associated with 1 in a million risk (2E-4 TPY) for a very near exposure (200 m distance). Of course, that doesn't mean that there are people this close to any of these facilities. The shortest distance (source to tribal boundary) associated with a facility with relatively high emissions (somewhat arbitrary cutoff of 0.1 TPY, which catches a little more than 10% of all sources) is about 8 km. The shortest distance to a facility emitting 1 TPY or more is about 35 km.

On risks, I found all tracts that intersect tribal boundaries in the continental US (there are no EtO point sources in Alaska). The attached file, "Tribal_Tracts_Risks",
gives the 2222 tracts that intersect tribal boundaries, along with the associated NATA risk from EtO, the total tract risk (from all HAP), and the risks from the different source groups (from all HAP). This file is sorted in decreasing level of EtO risk. The highest EtO risk is 9 in a million, which is about a quarter of the total risk (from all HAP) for that particular tract. Only 29 tracts have EtO risk > 1 in a million.

It is important to note that there are source types other than point sources that have EtO emissions in NEI, mainly solvents/coatings and waste disposal. These other source types are modeled in NATA as 12km square area sources, rather than emissions at point locations. Although the point sources dominate the emissions for the most part, there are some cases where the other source types can contribute. For example, the tract with the highest estimated EtO risk of 9 in a million is associated with solvents/coatings.

Feel free to forward this email to internal people of interest.

Mark

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

Message

From: Jones, Rhea [Jones.Rhea@epa.gov]
Sent: 7/23/2018 8:25:01 PM
To: Perez, Idalia [Perez.Idalia@epa.gov]
CC: Smith, Darcie [Smith.Darcie@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]; Sasser, Erika [Sasser.Erika@epa.gov]; Riha, Kristin [Riha.Kristin@epa.gov]
Subject: EtO/NATA materials for 7/24/18 ADD Special Purpose Call
Attachments: 2014 NATA Results Summary_Special Purpose Call.pptx; 2014 NATA Results by Region.pptx

Hi Idalia,

Please find the subject materials attached for tomorrow's call. Thanks!

Thank you,
Rhea Jones, Associate Director
Health and Environmental Impacts Division
USEPA - Office of Air Quality and Planning Standards
109 TW Alexander Drive (565D)
Research Triangle Park, NC 27711
919-541-2940

Message

From: Jones, Rhea [Jones.Rhea@epa.gov]
Sent: 6/26/2018 11:10:09 AM
To: Langdon, Robin [Langdon.Robin@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Riha, Kristin [Riha.Kristin@epa.gov]
CC: Sasser, Erika [Sasser.Erika@epa.gov]
Subject: FW: NATA Briefing for June 27
Attachments: 2014 NATA Results Briefing for OAR 06_27_2018.pptx

Thanks Robin! I'll take a quick look this morning and let you know if I have any question. I'd like to get this to the 4th floor ASAP this morning.

From: Langdon, Robin
Sent: Monday, June 25, 2018 5:39 PM
To: Jones, Rhea <Jones.Rhea@epa.gov>
Cc: Smith, Darcie <Smith.Darcie@epa.gov>; Sasser, Erika <Sasser.Erika@epa.gov>
Subject: NATA Briefing for June 27

Hi Rhea,

Attached is an updated NATA briefing based on this morning's conversations. Also, we received the NEI data from Marc H and will review and summarize that information in the morning.

Please let us know if you have any questions.
Thanks,
Robin

Robin Langdon
USEPA
Office of Air Quality Planning & Standards
Durham, NC 27711
919.541.5695
langdon.robin@epa.gov

Message

From: Koerber, Mike [Koerber.Mike@epa.gov]
Sent: 6/25/2018 9:12:11 PM
To: Nam, Ed [nam.ed@epa.gov]; Cain, Alexis [cain.alexis@epa.gov]; Siegel, Kathryn [siegel.kathryn@epa.gov]; Sieffert, Margaret [Sieffert.Margaret@epa.gov]
CC: Sasser, Erika [Sasser.Erika@epa.gov]; Shappley, Ned [Shappley.Ned@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Langdon, Robin [Langdon.Robin@epa.gov]; Shappley, Ned [Shappley.Ned@epa.gov]
Subject: Monitoring Options for R5
Attachments: Ethylene Oxide - Monitoring Options 06_25_2018 OAQPS.docx

As a follow-up to conversations last week, attached please find our thoughts about monitoring. Let me know if you have any questions. If you wish, then we'd be happy to talk through this on Tuesday.

Mike

Message

From: Langdon, Robin [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8DFD5FBD46A7494C82E49AEB435BFA8D-LANGDON, ROBIN]
Sent: 6/25/2018 8:00:07 PM
To: Davis, Alison [Davis.Alison@epa.gov]
Subject: FW: Monitoring Options for R5
Attachments: Ethylene Oxide - Monitoring Options 06_25_2018.docx

Robin Langdon
USEPA
Office of Air Quality Planning & Standards
Durham, NC 27711
919.541.5695
langdon.robin@epa.gov

From: Langdon, Robin
Sent: Monday, June 25, 2018 3:59 PM
To: Wayland, Richard <Wayland.Richard@epa.gov>; Koerber, Mike <Koerber.Mike@epa.gov>
Cc: Sasser, Erika <Sasser.Erika@epa.gov>; Shappley, Ned <Shappley.Ned@epa.gov>; Jones, Rhea <Jones.Rhea@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Subject: Monitoring Options for R5

Chet and Mike,

Attached please find an updated monitoring options document. We made some additional modifications to the version Ned prepared on Friday, and Ned and Jason Dewees have reviewed the version with these modifications.

Please let us know if you have any questions.

Thank you to everyone for their efforts to quickly prepare the attached document.
Robin

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Monitoring Options for Sterigenics, Willowbrook Illinois

Background

Current ambient monitoring methods for ethylene oxide can detect to 0.09 ug/m3, which is not low enough to capture concentrations of concern for long-term exposures.

Typically, ambient monitoring has been used in the air toxics program to validate a model-estimated concentration, especially in situations where there are uncertainties in emissions estimates. The standard (to date) for this type of monitoring has been EPA's Compendium Method TO-15, which is a method where air samples are collected in specially prepared canisters and analyzed by Gas Chromatography/Mass Spectrometry (GC/MS). However, with the December 2016 downward revision to the unit risk estimate for ethylene oxide (EtO), the use of TO-15 for this measurement may no longer be suitable for evaluating chronic risk from exposure to low ambient concentrations as the method detection limit for this compound using TO-15 is approximately 0.09 ug/m3.

EPA is working to develop new techniques for ambient monitoring of ethylene oxide.

Although ambient sampling using TO-15 can often provide an empirical measurement of risk for many pollutants, for EtO the use of a modeled measurement is more beneficial because of the limitations associated with the detection capabilities of TO-15. Ambient sampling is typically funded and performed by the regulated entity to evaluate both the occurrence of risk, as well as to document the effect of any changes made at the facility to address the risk. EPA is pursuing new ambient sampling and analytical techniques that may allow us to measure EtO at lower concentrations. The timing for developing the sampling and analytical techniques is currently not certain.

Monitoring Options

Given limitations in current ambient monitoring methods, directly monitoring the source at the point(s) of emissions may provide the most useful information for purposes of evaluating emissions and risk.

One alternative to ambient monitoring is to use the provisions of Section 114 of the Clean Air Act (CAA) to require a facility to measure the emissions (i.e., through stack testing) at all emissions points that emit EtO at that facility. This option is best suited for facilities with limited fugitive emissions points and presents a pathway to validate the actual emissions from the emissions points at a facility. The data generated from a stack testing program at a facility and subsequent monitoring events (e.g., parametric or continuous emissions monitoring) could then be paired with high-quality meteorological data collected during to better model the expected concentrations of EtO present in the surrounding community and potentially quantify the predicted risk.

Stack testing should be conducted under specific conditions for purposes of evaluating risk. For facilities with fugitive emissions of EtO, ambient monitoring within the facility fenceline and/or one-time traditional LDAR approach program will help supplement any stack testing.

While we understand that many facilities perform periodic stack testing on their emissions points to demonstrate compliance with an applicable federal or state rule, the nature of these tests is not necessarily designed to evaluate risk. These stack tests may not necessarily be reflective of the actual emissions during normal operation -- these tests are often performed at the edge of the operating window in worst-case conditions to demonstrate the likelihood of compliance at all

conditions under which the unit operates. We recommend that any stack test associated with the Section 114 request should be performed during representative normal operations and should include parametric monitoring that can be used to tie the emissions to a process parameter. Beyond stack testing, any sampling required should be accompanied by a long-term continuous emissions monitoring program to better understand the temporal variability of the emissions. Furthermore, for those facilities with expected fugitive emissions of EtO, it will be beneficial to require these facilities to collect ambient monitoring within the fenceline and/or conduct a one-time traditional leak detection and repair (LDAR) approach program to supplement any emissions testing.

An example stack test program is summarized below in Table 1 and Table 2. These examples do not include parametric monitoring requirements. The parametric monitoring should be tied to product throughput and/or the performance characteristics of the control device.

Table 1: Summary of Outlet Emissions Measurement Methods and Alternative Methods

Pollutant	Required Method	Possible Alternative Method	Target Reported Units of Measure
Ethylene Oxide/Propylene Oxide[b]	U.S. EPA Method 320 with a minimum sample time of 4 hours per run and a nominal detection level of less than 0.5 ppm. All compounds quantified by Method 320 must be validated according to Section 13.0 of Method 320.	U.S. EPA Method 18[a]. All compounds quantified by Method 18 meet the recovery study specified in Section 8.4 of Method 18.	Lbs/hr and ppmvd
O_2/CO_2	U.S. EPA Method 3A. Simultaneous with each pollutant test run.	U.S. EPA Method 3B	% volume, dry
Moisture	U.S. EPA Method 4. Simultaneous with each pollutant test run.	U.S. EPA Method 320	% volume
Flowrate	U.S. EPA Method 2. Simultaneous with each pollutant test run.	U.S. EPA Method 2A, 2B, 2C, or 2D	ascfm and dscfm

[a] Minimum Detection Limits for this method must be empirically derived and developed according to the procedures found in Section 15 of U.S. EPA Method 301.
[b] Depending on the source type, additional compounds can be considered.

EPA-R6-2021-005139 6.7.2022 Prod ED_005994A_00001077-00002

Table 2: 30-Day THC Monitoring[c]

Pollutant	Recommended Method	Alternative Method	Target Reported Units of Measure
THC	U.S. EPA Method 25A continuously for 30 days. Calibrate the measuring instrument with ethylene oxide. The low level and high level calibration gases (see sections 7.1.3 and 7.1.5 of Method 25A) must bracket the measured concentrations or a maximum high level calibration gas (see section 7.1.5 of Method 25A) of 10 ppm ethylene oxide must be used.	U.S. EPA Method 320 although in lieu of a total hydrocarbon, ethylene oxide will be measured continuously.	ppmvw

[c] To potentially reduce the cost, the 30-day monitoring could be performed on the point source with the highest expected mass emissions as determined from the stack test results.

Facilities in Region 3 w/Elevated Risks

MSA Area Name (City/State)	Facility Name	Type of Facility	Potentially Applicable MACT Associated with EtO Emissions	Reason
Allentown-Bethlehem-Easton, PA-NJ (Allentown, PA)	B Braun Med Inc	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	State – no changes
Charleston, WV (Institute, WV)	Union Carbide Corporation – Institute	Chemical plant	MON, HON	Facility – parameter changes
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD (New Castle, DE)	Croda Inc	Chemical plant	NA – area source	State – no changes
Pittsburgh, PA (Clairton, PA)*	USS/Clairton Works	Coke oven	Coke ovens	

* For the Pittsburgh, PA area the primary risks are driven by coke oven emissions from point sources.

Facilities in Region 4 w/Elevated Risks

MSA Area Name (City/State)	Facility Name	Type of Facility	Potentially Applicable MACT Accordance with Dec Emissions	Review
Atlanta-Sandy Springs-Roswell, GA (Covington, GA)	C R Bard	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	Facility/TRI – no changes
Atlanta-Sandy Springs-Roswell, GA (Smyrna, GA)	Griffith Micro Science Inc.	Sterilizer (?)		
Charleston-North Charleston, SC (Charleston, SC)	Solvay (Lanxess)	Chemical plant	MON	Ongoing with region, state, and facility

Facilities in Region 5 w/ Elevated Risks

NSA Area Name (City/State)	Facility Name	Type of Facility	Potentially Applicable MACT Associated with EtO Emissions	Review
Grand Rapids-Wyoming, MI (Grand Rapids, MI)	Medtronic, Inc., Sterile Systems Operation	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	Region – no changes
Chicago-Naperville-Elgin, IL-IN-WI (Willowbrook, IL)	Sterigenics US LLC	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	Region working with facility
Chicago-Naperville-Elgin, IL-IN-WI (Waukegan, IL)	Medline Industries Inc Northpoint Services Div	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	State – no changes

Facilities in Region 6 (LA) w/Elevated Risks

MSA Area (Name (State))	Facility Name	Type of Facility	Potentially Applicable Rules Associated with EIS Changes	Review
New Orleans-Metairie, LA (LaPlace, LA)*	Denka	Chemical plant	NA	NA
New Orleans-Metairie, LA (New Hampton, LA)	BCP Ingredients	Chemical plant	NA – area	Facility - no changes
New Orleans-Metairie, LA (Hahnville, LA)	Union Carbide St. Charles	Chemical plant	HON, Polyols	Facility – emissions changes for a flare
Lake Charles, LA (Reserve, LA)	Air Products Reserve Plant (Evonik)	Chemical plant	NA – area	LA DEQ - no changes
Baton Rouge, LA (St. Gabriel, LA)	Taminco – St Gabriel Plant	Chemical plant	NA – area	LA DEQ - no changes

* For the LaPlace, LA area the primary risks are driven by emissions of chloroprene.

Facilities in Region 6 (TX/NM) w/Elevated Risks

Risk Screening Playbook	Facility Name	Type of facility	Potentially Applicable NESHAP Approved with EPA Concurrence	Source
Beaumont-Port Arthur, TX (Port Neches, TX)	PORT NECHES PLANT	Chemical plant	HON	TCEQ - no changes
Laredo, TX (Laredo, TX)	Midwest Sterilization Corp	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	TRI - no changes
Marshall, TX (Longview, TX)	TEXAS OPERATIONS	Chemical plant	HON, MON, OLD	Facility - minor changes
Houston-The Woodlands-Sugar Land, TX (Houston, TX)	SHELL TECHNOLOGY CENTER HOUSTON	Chemical plant	NA - area	TCEQ - no changes
Las Cruces, NM (Santa Teresa, NM)	Santa Teresa Facility	Sterilizer	Subpart O – EtO Emissions Standards for Sterilization Facilities	Emissions decreased after 2014

Message

From: Langdon, Robin [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8DFD5FBD46A7494C82E49AEB435BFA8D-LANGDON, ROBIN]
Sent: 7/13/2018 5:06:43 PM
To: Koerber, Mike [Koerber.Mike@epa.gov]
CC: Jones, Rhea [Jones.Rhea@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]
Subject: Materials for July 16 & 17
Attachments: Agenda_Discussion with Bill Wehrum_071618.docx; NATA EtO rollout steps 071118 simple.xlsx; Agenda_EtO discussion with Regions 3-6 _071718.docx; Facilities in Regions 3 4 5 6.pptx

Hi Mike,

Per Rhea's voicemail, attached are the following materials:

- For a July 16th conversation with Bill W
  - Agenda
  - Timeline
- For a July 17th conversation with Bill W and Ras
  - Agenda
  - Tables with NATA elevated risk facilities by Region

Robin

Robin Langdon
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Durham, NC 27711
919.541.5695
langdon.robin@epa.gov

Message

From: Langdon, Robin [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8DFD5FBD46A7494C82E49AEB435BFA8D-LANGDON, ROBIN]
Sent: 6/25/2018 7:50:54 PM
To: Davis, Alison [Davis.Alison@epa.gov]; Jones, Rhea [Jones.Rhea@epa.gov]; Bremer, Kristen [Bremer.Kristen@epa.gov]
Subject: Most Recent NATA Briefings and EtO Pager
Attachments: EtO discussion Jun 21 2018.docx; 2014 NATA Results Briefing for OAR Jun 21 2018.pptx; 2014 NATA Results Briefing for OAR R5.pptx

For you guys.

Robin Langdon
USEPA
Office of Air Quality Planning & Standards
Durham, NC 27711
919.541.5695
langdon.robin@epa.gov

Message

From: Truesdell, Raymond [truesdell.raymond@epa.gov]
Sent: 8/15/2018 1:38:07 PM
To: Ashley, Jackie [Ashley.Jackie@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]
CC: Smith, Darcie [Smith.Darcie@epa.gov]
Subject: RE: link to updated spreadsheet
Attachments: FOR OCIR-draft-deliberative_followup list.xlsx

Hi Jackie,

Kelly asked me to make some edits to the facilities spreadsheet. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

I've attached a new version of the spreadsheet here. In HEID, we're calling this list (currently of 14) the "follow-up list," mainly to differentiate it from the list of facilities with higher tract-level risks. So I added that to the end of the file name, mainly for our benefit. It's tough to keep up with all the lists floating around!

Thanks for your help with this.

Rod

From: Ashley, Jackie
Sent: Tuesday, August 14, 2018 3:23 PM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Truesdell, Raymond <truesdell.raymond@epa.gov>
Subject: RE: link to updated spreadsheet

Thanks Kelly. That's an Important clarification to my draft shorthand. I won't use this phrasing elsewhere.

Jackie Ashley - US EPA - Office of Air Quality Planning and Standards - 919-541-7664 – ashley.jackie@epa.gov

---

From: Rimer, Kelly
Sent: Tuesday, August 14, 2018 3:08 PM
To: Truesdell, Raymond <truesdell.raymond@epa.gov>; Ashley, Jackie <Ashley.Jackie@epa.gov>
Subject: RE: link to updated spreadsheet

One edit:
GTE 100

- Ex. 5 Deliberative Process (DP)

NATA does not indicate problems, it tells us where we might look further to better understand the risk.

From: Truesdell, Raymond
Sent: Tuesday, August 14, 2018 2:46 PM
To: Ashley, Jackie <Ashley.Jackie@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>
Subject: RE: link to updated spreadsheet

Hi Jackie,

I just verified with Ted; what you have here is correct. I will update the tabs with the short explanation that Kelly requested.

Rod

From: Ashley, Jackie
Sent: Tuesday, August 14, 2018 2:43 PM
To: Rimer, Kelly <Rimer.Kelly@epa.gov>; Truesdell, Raymond <truesdell.raymond@epa.gov>
Subject: RE: link to updated spreadsheet

Here's what I jotted down from our conversation

Checklist

Ex. 5 Deliberative Process (DP)

Jackie Ashley - US EPA - Office of Air Quality Planning and Standards - 919-541-7664 – ashley.jackie@epa.gov

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From: Ashley, Jackie
Sent: Tuesday, August 14, 2018 2:42 PM
To: Rimer, Kelly <rimer.kelly@epa.gov>; Truesdell, Raymond <truesdell.raymond@epa.gov>
Subject: link to updated spreadsheet

https://usepa.sharepoint.com/sites/oar_Work/NATA_LEAN/EtO%20Rollout%20restricted/Forms/AllItems.aspx?RootFolder=%2Fsites%2Foar%5FWork%2FNATA%5FLEAN%2FEtO%20Rollout%20restricted%2FHill&FolderCTID=0x012000E19AE90F8CBAE6478420DC0CD22B8F5D&View=%7B8C27CA5C%2DD209%2D41E8%2DAF4D%2DFE8A5DDFC292%7D

Jackie Ashley - US EPA - Office of Air Quality Planning and Standards - 919-541-7664 – ashley.jackie@epa.gov

Message

From: Rimer, Kelly [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=123A21A46D0E4E53A590798CDCC3FB47-KRIMER]
Sent: 8/13/2018 6:12:32 PM
To: 'Ted Palma' [Palma.Ted@epa.gov]; Morris, Mark [Morris.Mark@epa.gov]; Truesdell, Raymond [truesdell.raymond@epa.gov]
Subject: FW: 2014 NATA Short Term actions and facilities list
Attachments: Facility checklist_Aug13 Final.edit.xlsx

From: Rimer, Kelly
Sent: Monday, August 13, 2018 1:41 PM
To: Koerber, Mike <Koerber.Mike@epa.gov>; Smith, Darcie <Smith.Darcie@epa.gov>
Cc: Sasser, Erika <Sasser.Erika@epa.gov>
Subject: RE: 2014 NATA Short Term actions and facilities list

Mike,
Per your email below.

From: Koerber, Mike
Sent: Monday, August 13, 2018 1:38 PM
To: Smith, Darcie <Smith.Darcie@epa.gov>; Rimer, Kelly <Rimer.Kelly@epa.gov>
Subject: Fwd: 2014 NATA Short Term actions and facilities list

Can you send me a revised list? Thanks.

Sent from my iPhone

Begin forwarded message:

> **From:** "Stenger, Wren" <stenger.wren@epa.gov>
> **Date:** August 13, 2018 at 1:15:43 PM EDT
> **To:** "Koerber, Mike" <Koerber.Mike@epa.gov>, "Sasser, Erika" <Sasser.Erika@epa.gov>, "Lassiter, Penny" <Lassiter.Penny@epa.gov>
> **Cc:** "Stenger, Wren" <stenger.wren@epa.gov>
> **Subject: 2014 NATA Short Term actions and facilities list**
>
> Mike, all,
>
> After hearing the criteria of 1000 in 1M risk for ethylene oxide for the targeted short term action, R6 requests that you remove Air Products Performance Manufacturing Inc—Reserve Plant, LA from the facilities' short-term action list. We can pull it in functionally after 2014 NATA is released, but prefer it is not included on the list. I discussed this with the R6 DRA, and he agrees.
>
> WREN STENGER
> DIRECTOR, MULTIMEDIA DIVISION

EPA REGION 6 DALLAS, TEXAS
214.665.6583

Message

From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 12/8/2016 6:17:38 PM
To: Jinot, Jennifer [Jinot.Jennifer@epa.gov]
CC: Rimer, Kelly [Rimer.Kelly@epa.gov]; Palma, Ted [Palma.Ted@epa.gov]
Subject: RE: ambient ethylene oxide exposures
Attachments: EO Block Risks 20142.xlsx

Hi, Jennifer.
We recently completed modeling for the 2014 NATA point sources. We were interested ourselves in the impact of the new value, so we used these screening model results to estimate that. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP) We don't release the block-level data to the public, so please don't forward the attached outside of EPA.
Thanks

Mark

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

From: Jinot, Jennifer
Sent: Thursday, December 08, 2016 11:57 AM
To: Morris, Mark <Morris.Mark@epa.gov>
Cc: Rimer, Kelly <Rimer.Kelly@epa.gov>
Subject: ambient ethylene oxide exposures
Importance: High

hi, Mark. i am the current project manager for EPA's IRIS assessment on the carcinogenicity of ethylene oxide (EtO). you may recall that i contacted you in 2005 about ambient exposure levels of EtO, and you provided me with the information that maximum modeled levels are on the order of 1-2 ug/m^3 (~0.5 – 1 ppb). do you have any more recent information about ambient EtO levels, and are these maximum modeled levels equivalent to estimates of "fence line" exposures around commercial sterilization facilities? thank you for any additional information that you can provide, and if possible, we would really appreciate a quick reply, as we have a "fire drill" to provide some exposure information to our upper managers tomorrow afternoon. thanks!! jennifer

Message

From: Morris, Mark [Morris.Mark@epa.gov]
Sent: 5/22/2017 7:55:10 PM
To: Lavoie, Tegan [lavoie.tegan@epa.gov]; Diem, Art [Diem.Art@epa.gov]; Carey, Angela [carey.angela@epa.gov]; Godfrey, Janice [Godfrey.Janice@epa.gov]; Howard, Jodi [Howard.Jodi@epa.gov]; Fellner, Christian [Fellner.Christian@epa.gov]; Smith, Darcie [Smith.Darcie@epa.gov]; Lassiter, Penny [Lassiter.Penny@epa.gov]; Goehl, Eric [Goehl.Eric@epa.gov]
CC: Palma, Ted [Palma.Ted@epa.gov]; Rimer, Kelly [Rimer.Kelly@epa.gov]
Subject: NATA data for chemical facilties
Attachments: ChemFac_NATA_Join_Set1_All.xlsx

All,

We have taken the SPPD list of chemical facilities and joined the 2014 NATA version 1 point source risk results to it. The NATA v1 results are the maximum cancer risk and noncancer HI values at census block level. **These are data that are not and should not be released to the public. The census-block-level results are released only to state/local/tribal reviewers for the purpose of review/correction before the final v2 release, where the block values are aggregated up to census tract level before public release**. We used the EIS facility ID for matching purposes, and by our count 3140 of the 5811 facilities in your list have the EIS ID field populated. As we discussed in the 5/18 meeting, we pulled the NATA data for the 3140 now, and will pull the remainder later when EIS IDs are available.

We have included detailed data (at the facility/emission point/pollutant level) for facilities with cancer risk > 10 in 1 million, or noncancer respiratory or neurological HI > 2. For facilities with risks below these criteria, we included only the total facility cancer risk, and respiratory and neurological HI values (we did not generate the finer detailed data for the lower risk facilities). There are several things to note about the NATA v1 data. First, the data came from two model runs – one last September and one last December. The main difference between the runs was the updating of the cancer unit risk estimate for ethylene oxide (which went up 56-fold). Facilities with data from the December run will have a "Y" in the "RecentRun" field. Because we had already generated detailed results for higher risk facilities in the September run, we did not update those results because those facilities had already been identified as higher risk for other things – the December run added some additional facilities to the high risk list because of the EO change and other things, but the point being made is that the detailed results for the facilities with data from the September run will **not** reflect the updated EO URE. Of the 3140 facilities, 579 of them (18%) did not match with the NATA data. We looked into a sample of these, and many were not in the 2011 NATA either, but some were with insignificant emissions. Some facilities may not match because they emit only criteria pollutants, or because there were no reported emissions for the year 2014, or other reasons, and the only way to know would be to do a detailed analysis of them all, which likely isn't worth the time.

Another thing to note about the NATA results (as compared to the RTR results we normally provide) is that the census blocks have not received the QA they otherwise get during an RTR assessment. So, there will be some results higher than they should be because there are likely some census blocks within facility boundaries, and some results are lower than they should be because there may be residences closer to a facility than the census block centroid, and in the RTR process we add more receptors to reflect closer residences.

Some explanation of the data fields. All those that have an "SPPD" prefix are from the SPPD facility list, and all other fields are from the NATA data. Columns O, P, and Q give the overall (considering all sources and pollutants) facility risk, respiratory HI, and neurological HI, respectively, at the census block with the highest value of each metric. So, these overall values are repeated over all the rows for that facility. Columns S, T, and U give the facility risk and HIs for each pollutant (so, for a given facility with multiple sources emitting benzene, for example, the facility benzene risk will be repeated across multiple rows). Columns V, W, and X give the risk and HIs for a source/pollutant combination, and columns Y, Z, and AA give the risk and His by source (considering all pollutants).

Given the uncertainties in the NATA analysis, like the block location issue, the NATA results are viewed as screening values. However, we think the data can be useful in focusing SPPD in data collection and quality assurance. We

understand that SPPD will likely focus on the higher risk facilities to ensure that they are in a source category, and that the data are accurate. However, as we have mentioned, attention should also be given to facilities with lower modeled risks. There is likely some level of analysis that can be done (for example, random checking of some lower risk facilities) to help ensure that the facilities with lower modeled risks have been adequately characterized, and that we don't ignore cases where unreported or underreported emissions, or a census block issue, or some other issue creates a false negative. Without some level of review of lower risk facilities, we potentially set ourselves up for the discovery of issues during the public comment process.

Please let us know if you have questions on these data.

Mark

Mark Morris
USEPA
Mailcode C539-02
109 TW Alexander Drive
RTP, NC 27711
(919) 541-5416
morris.mark@epa.gov

Message

From: Davis, Alison [Davis.Alison@epa.gov]
Sent: 8/13/2018 10:16:26 PM
To: Ashbee, Blake [ashbee.blake@epa.gov]; Bender, Emily [Bender.Emily@epa.gov]; Brees, Angela [Brees.Angela@epa.gov]; Carey, Curtis [Carey.Curtis@epa.gov]; Deegan, Dave [Deegan.Dave@epa.gov]; Faulk, Libby [Faulk.Libby@epa.gov]; Glenn, William [Glenn.William@epa.gov]; Grantham, Nancy [Grantham.Nancy@epa.gov]; Gray, David [gray.david@epa.gov]; Gutro, Doug [Gutro.Doug@epa.gov]; Harris-Young, Dawn [Harris-Young.Dawn@epa.gov]; Holsman, Marianne [Holsman.Marianne@epa.gov]; Kelley, Jeff [kelley.jeff@epa.gov]; Kluesner, Dave [kluesner.dave@epa.gov]; Libertz, Catherine [Libertz.Catherine@epa.gov]; Lincoln, Larry [Lincoln.Larry@epa.gov]; Mears, Mary [Mears.Mary@epa.gov]; Mutter, Andrew [mutter.andrew@epa.gov]; Mylott, Richard [Mylott.Richard@epa.gov]; Philip, Jeffrey [Philip.Jeff@epa.gov]; Richardson, RobinH [Richardson.RobinH@epa.gov]; Rowan, Anne [rowan.anne@epa.gov]; schafer, joan [schafer.joan@epa.gov]; Subramanian, Hema [Subramanian.Hema@epa.gov]; Taheri, Diane [Taheri.Diane@epa.gov]; White, Terri-A [White.Terri-A@epa.gov]; Wise, Allison [Wise.Allison@epa.gov]; Zito, Kelly [ZITO.KELLY@EPA.GOV]
CC: Bremer, Kristen [Bremer.Kristen@epa.gov]
Subject: NATA - Updated List
Attachments: Facility checklist_Aug13 Final.edit.xlsx

INTERNAL – NOT READY FOR RELEASE

Hi all,
Attached is an updated list of facilities where we plan to seek additional information as part of our effort to address emissions of ethylene oxide. Please use this list for planning your outreach.

The majority of the facilities on this list were selected because they have a NATA block level risk of more than 1,000 in 1 million. While block level risk does not appear on the mapping application on the NATA website, it is an input into calculating risk at the census tract.

There are two facilities on the list that do not have a risk greater than 1,000 in 1 million. Those were identified based on work done in Region 5, and through the review of an air emissions rule for chemical manufacturing (the Solvay facility in Region 4).

I'm happy to answer any questions.
Thanks.
-Alison

Alison Davis
Acting Director
Policy Analysis & Communications Staff
US EPA, Office of Air Quality Planning & Standards
Research Triangle Park, NC 27711
Desk: 919-541-7587
Mobile: 919-624-0872

Message

From: Koerber, Mike [Koerber.Mike@epa.gov]
Sent: 8/22/2018 7:08:57 PM
To: Bremer, Kristen [Bremer.Kristen@epa.gov]; Davis, Alison [Davis.Alison@epa.gov]
Subject: FW: Live!!

FYI

From: Woods, Clint
Sent: Wednesday, August 22, 2018 3:04 PM
To: Koerber, Mike <Koerber.Mike@epa.gov>
Cc: Lewis, Josh <Lewis.Josh@epa.gov>
Subject: Re: Live!!

Why does R5 have a stand-alone site?

On Aug 22, 2018, at 3:02 PM, Koerber, Mike <Koerber.Mike@epa.gov> wrote:

> In case you haven't heard, the NATA and ethylene oxide web sites went live about an hour ago:
>
> https://www.epa.gov/national-air-toxics-assessment
>
> https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide
>
> Also, about the same time, Region 5 went live with their Sterigenics web site:
>
> https://www.epa.gov/il/sterigenics-willowbrook-facility
>
> Thank you, Clint, with helping to get this done!
>
> Mike

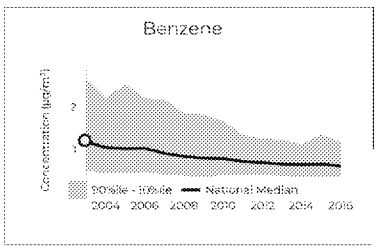
2014 National Air Toxics Assessment (NATA) Preview

August 16, 2018 Webinar

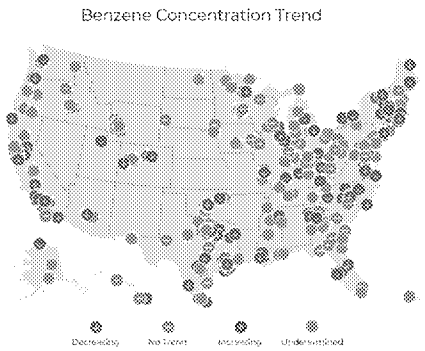
What is NATA?

- The National Air Toxics Assessment, or NATA, is EPA's thorough review of air toxics in the United States, based on modeled air quality.
- NATA uses the best science and emissions data available to estimate health risks from air toxics.
- NATA is national in scale and intended as a *screening tool.*
- NATA can be used by the EPA and states/locals and tribes to help determine what pollutants or areas of the country to investigate further, to better understand risks.
- NATA should not be used:
  - to pinpoint risk or exposure values at a specific place (like a home or school);
  - to characterize or compare risks or exposures at local levels (such as between neighborhoods);
  - as the sole basis for risk reduction plans or regulations, or
  - to control specific sources or pollutants

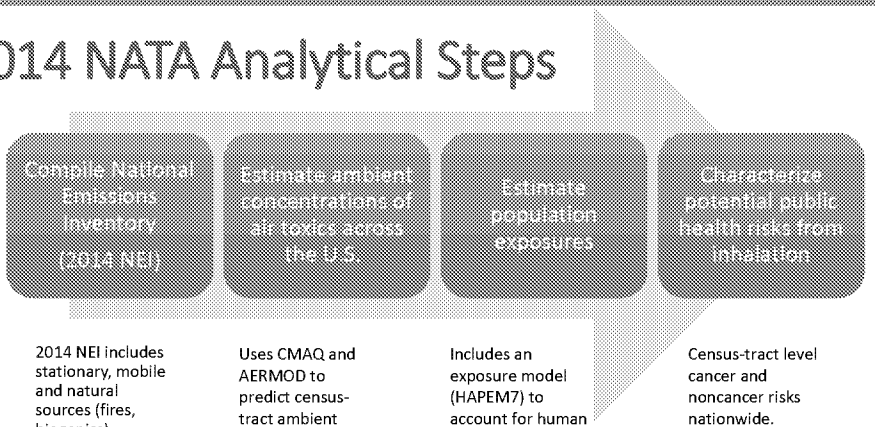
National air toxics trends are downward



Our Nation's Air: Status and Trends Through 2017 : Benzene (2003 – 2017)



2014 NATA Analytical Steps



2014 NEI includes stationary, mobile and natural sources (fires, biogenics).

NATA includes 180 listed air toxics plus diesel particulate matter (PM)

Uses CMAQ and AERMOD to predict census-tract ambient concentrations nationwide.

Includes an exposure model (HAPEM7) to account for human activity data, commuting patterns, and near-roadway exposures.

Census-tract level cancer and noncancer risks nationwide.

What data are included in NATA?

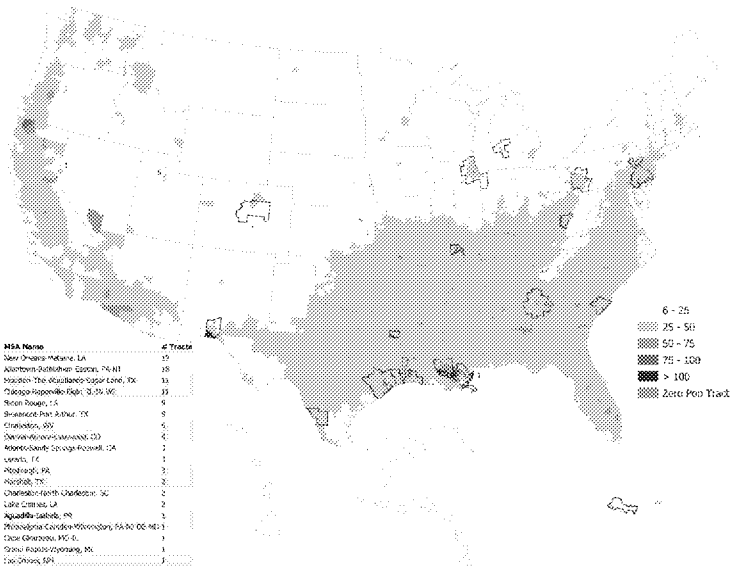
- NATA assessments provide screening-level estimates of the risk of cancer and other serious health effects from breathing (inhaling) air toxics.
- This helps show which air toxics and source types may contribute to health risks in certain places.
- NATA results are reported at the census tract level.
- The 2014 NATA includes estimates of ambient and exposure concentrations for 180 listed air toxics plus diesel PM, which we assess for noncancer effects only.

How can states/locals and tribes use NATA?

- States/locals and tribes can use NATA results to:
  - prioritize pollutants and emission source types;
  - identify locations for further, more detailed study;
  - get a starting point for local assessments;
  - focus community efforts;
  - inform monitoring programs;
  - prioritize sensitive locations for outdoor air toxics monitoring.

- Using NATA as an initial screening tool, air agencies can then study areas in more detail, focusing on where the risks to people may be greatest.
  - They may also choose to perform a smaller-scale local assessment, which allows them to use more detailed data than we can in NATA.

2014 NATA Results: National Average Cancer Risk



MSA Name	# Tracts
New Orleans-Metairie, LA	19
Allentown-Bethlehem-Easton, PA-NJ	18
Houston-The Woodlands-Sugar Land, TX	13
Chicago-Naperville-Elgin, IL-IN-WI	10
Baton Rouge, LA	9
Beaumont-Port Arthur, TX	9
Charleston, WV	5
Denver-Aurora-Lakewood, CO	4
Atlanta-Sandy Springs-Roswell, GA	3
Laredo, TX	3
Pittsburgh, PA	3
Norfolk, TX	3
Charleston-North Charleston, SC	2
Lake Charles, LA	2
Aguadilla-Isabela, PR	2
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1
Cape Girardeau, MO-IL	1
Grand Rapids-Wyoming, MI	1
Las Cruces, NM	1

19 MSAs with Elevated Cancer Risks (≥100-in-1 million)

2014 NATA

MSA	Facilities	Population	MSA	Facilities	Population
New Orleans-Metairie, LA**, †	19	2,000	Pittsburgh, PA**, †	3	100
Allentown-Bethlehem-Easton, PA-NJ	18	600	Charleston-North Charleston, SC	2	100
Chicago-Naperville-Elgin, IL-IN-WI†	11	300	Lake Charles, LA	2	100
Houston-The Woodlands-Sugar Land, TX	11	300	Marshall, TX	2	200
Baton Rouge, LA	9	200	Aguadilla-Isabela, PR	1	300
Beaumont-Port Arthur, TX	8	300	Cape Girardeau, MO-IL	1	200
Charleston, WV	6	400	Grand Rapids-Wyoming, MI	1	100
Denver-Aurora-Lakewood, CO†	4	500	Las Cruces, NM	1	200
Atlanta-Sandy Springs-Roswell, GA	3	200	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD†	1	100
Laredo, TX	3	100			

** With the exception of New Orleans-Metairie, LA (chloroprene) and Pittsburgh, PA (coke oven emissions), the primary risks are driven by emissions of ethylene oxide from point sources.

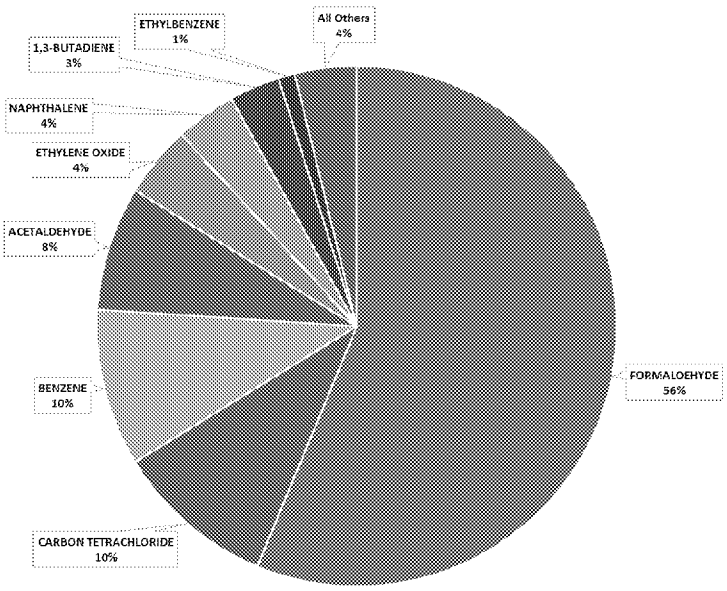
† The following 5 MSAs were also in the 2011 NATA as MSAs with elevated cancer risks: Chicago-Naperville-Elgin, IL-IN-WI; Denver-Aurora-Lakewood, CO; New Orleans-Metairie, LA; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD; and Pittsburgh, PA.

What NATA tells us

- National average cancer risk estimated to be 30-in-1 million.
- Fewer than 1% of the census tracts in the country (106 tracts in 19 metropolitan statistical areas) have an estimated cancer risk of ≥ 100-in-1 million.
- Tracts with estimated cancer risks of ≥ 100-in-1 million are primarily driven by point source emissions of ethylene oxide, chloroprene, and coke oven emissions.
- Secondary formation (formaldehyde and acetaldehyde) estimated to contribute about half of the national average cancer risk.
  - Secondary formation is from both anthropogenic (stationary and mobile) sources as well as biogenic sources.

National Average Cancer Risk Pollutant Contributions (30-in-1 million)

2014 NATA



10

New risk estimates for ethylene oxide

- EPA completed its review of available health information for ethylene oxide and classified ethylene oxide as a known human carcinogen in December 2016.
  - This work included an increase in the potency estimates for ethylene oxide, which are used to inform risk estimates in 2014 NATA.
- The 2014 NATA results suggest that ethylene oxide is a potential concern in several areas across the country.
- EPA has begun to gather additional information in identified areas, focusing first on those areas with the largest estimated potential for risk.

Next Steps

- 2014 NATA will be rolled out soon, on the following website: *https://www.epa.gov/nata*
- To keep you informed as the EPA works to address ethylene oxide, a separate website will be updated regularly. The address will be *https://www.epa.gov/ethylene-oxide*
- We will send you a link to the preview SharePoint site this afternoon.

The National Emissions Inventory (NEI)

OAQPS, Air Quality Assessment Division,
Emissions Inventory and Analysis Group

Outline

Part 1

- NEI regulatory background
- NEI goals and drivers
- NEI details and highlights
- How we help State/Local/Tribes (SLTs) calculate and submit emissions
- NEI improvements and results
- NEI program new initiatives / 2017 NEI development
- 2017 NEI production timeline

Part 2

- 2014 NEI Report Story Map – communicating the data

NEI Regulatory Background

- Clean Air Act (CAA) 110 (a)(2)(F) authorizes EPA administrator to collect emissions data as needed to support NAAQS program
- CAA 182(a)(3) requires triennial emissions for O_3 nonattainment areas
- Air Emissions Reporting Rule (AERR)
  - Criteria air pollutants and precursors (CAPs) required
  - Hazardous Air Pollutants (HAPs) and Greenhouse Gases (GHGs) voluntary
  - Point sources for NAAQS major sources (potential-to-emit thresholds) and voluntarily lower, with Lead at 0.5 tons/year actual
  - Events (fires) voluntary
  - All other sources (mobile + nonpoint) county level
  - Complete triennial inventory with annual very-large (Type A) point sources

NEI Five Key Goals

- Complete: All emissions to the atmosphere included, whether regulated or unregulated, for all counties/tribes including Puerto Rico and the Virgin Islands
- Represents the year of the inventory
- Uses best available information
- Transparent - includes the emissions origin
  (who provided, factor, activity, method)
- Timely

4

Fast slide: summarize that v2 release comes down to "good enough" vs policy driver like NATA

NEI Drivers - Uses by SLTs

- NAAQS and Regional Haze Implementation
  - Starting point for State Implementation Plan (SIP) inventory requirements for O_3, $PM_{2.5}$, transport, and regional haze SIPS
    - Planning inventories
    - Modeling inventories
  - NAAQS Designations: emissions (along with monitoring data) are among the most important factors in designation tools used by SLTs
- Emissions trends – national and state
  - NEI trends website
  - ECOS ("ECOS Results" metrics) website: interactive tool where NEI is one of four display measures for showing state-level environmental progress

NEI Drivers - Uses by EPA and Others (1 of 2)

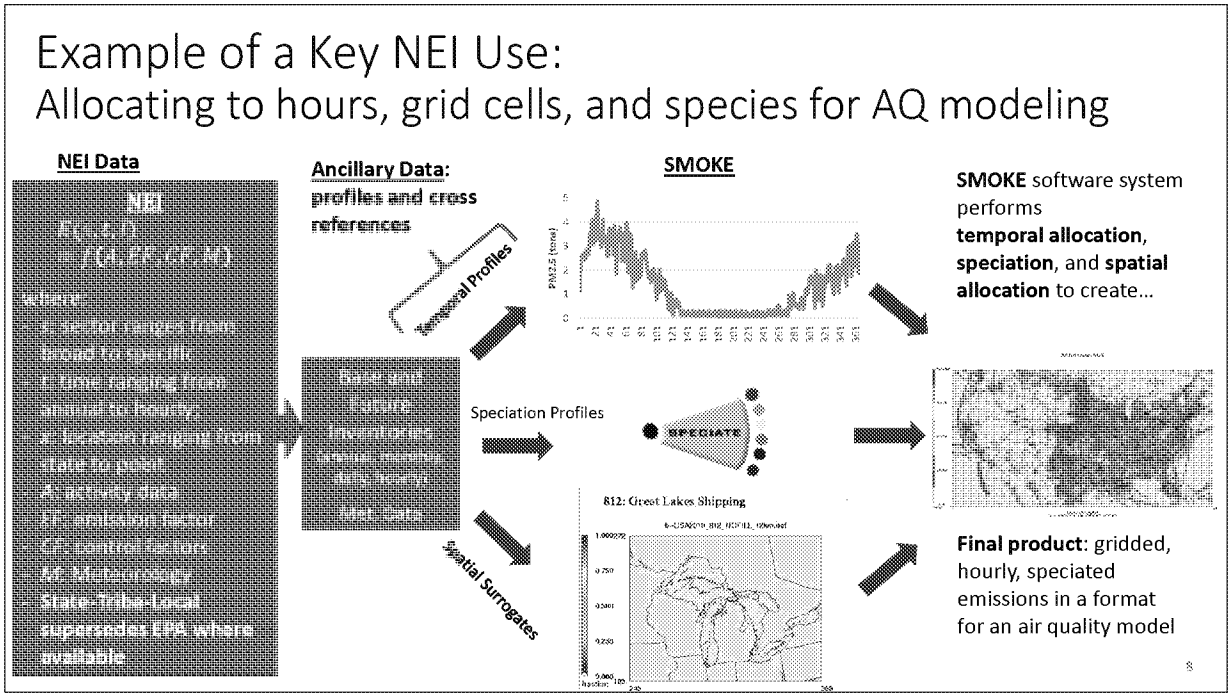
- Air quality modeling
  - NAAQS Regulatory and Regional Haze: Transport rules, NAAQS Regulatory Impact Analysis (RIA), OTAQ RIAs, international transport
  - National Air Toxics Assessment (NATA) – risk results used by SLTs
  - Technology Review (RTR): starting point
  - ORD air quality model development
  - Centers for Disease Control and Prevention (CDC) air quality analysis
  - Global modeling inventories used by international community
- Emissions trends – national and state
  - Air trends report
  - ORD Report on the Environment
  - International agreements
  - Public and press requests

6

International examples: (e.g., CLRTAP, US-Canada AQ Agreement, Arctic Monitoring and Assessment Programme (AMAP), Commission for Environmental Cooperation (CEC))

NEI Drivers - Uses by EPA and Others (2 of 2)

- Other NAAQS uses: NAAQS policy assessments and integrated science assessments (ORD)
- Monitoring: siting purposes
- Public information via NEI website
  - 2014 NEI Report Story Map (next)
  - NEI query tools, technical support documentation, submittal instructions, guidance, plan, instructions
  - Emissions processes for EPA's air quality modeling
- Data quality analysis
  - OECA Enforcement and Compliance History (ECHO) web tool for regulated facilities
  - TRI – missing or significant facility differences



NEI important to international community: methods/factors are often used as example for others

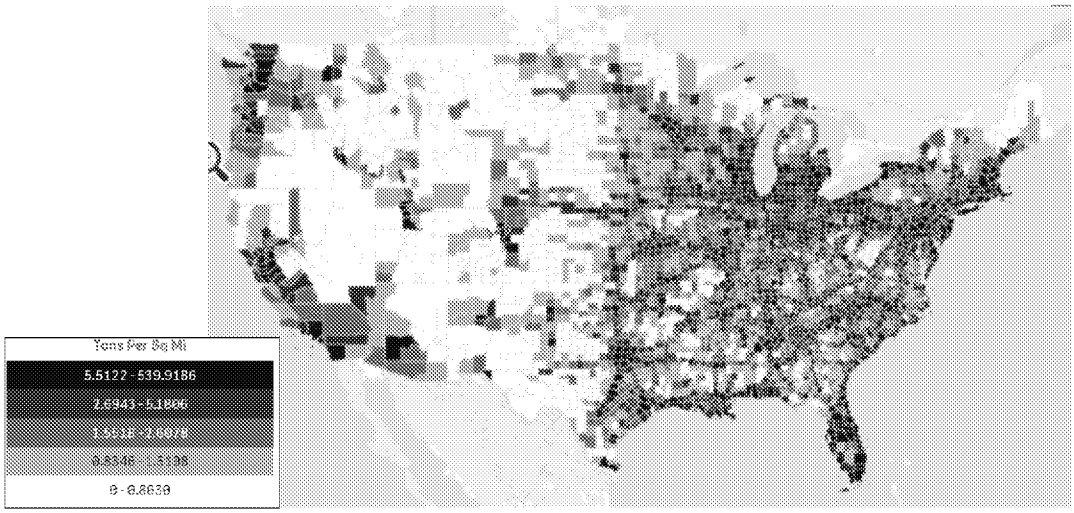
NEI Details

- Types of emission sources included and resolution
  - Point sources (facility-process for ~87,000 facilities)
    - Examples include electric generation and industrial facilities
  - Nonpoint sources (county-process)
    - Onroad mobile sources: exhaust, evaporative, brake and tire wear, road dust
    - Nonroad mobile sources: equipment (e.g., lawnmowers, construction, farm, mining), aircraft, ships, and railroads
    - Biogenic soil and vegetation (county-process)
    - Other nonpoint sources: residential heating, gas stations, animal waste, solvents
  - Wild and Prescribed Fires (daily-point "Events")
- HAPs, GHGs and Black Carbon
  - EPA augments to make HAPs more complete (e.g., Toxics Release Inventory data)
  - GHGs not provided in NEI for point and nonpoint – defer to OAP's inventory
  - Elemental carbon, organic carbon and diesel particulate matter are computed by EPA using factors applied to $PM_{2.5}$. We assume black carbon = elemental carbon.

3

Another fast slide: don't spend too much time on this slide

2014 NEI NOX Mobile Emissions (from Story Map)

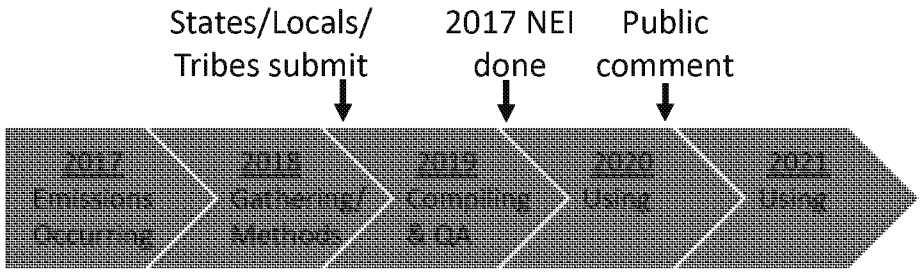


Screenshot of NOX Mobile: Story Map demo to follow

NEI Program Highlights

- Full annual inventory w/ associated "modeling platform" every 3 years
  - Updated methods and models (e.g., MOVES for onroad/nonroad)
  - New sources: oil/gas processes, composting, BBQs, animal dust
  - Activity inputs for nonpoint, mobile and fires
  - Quality and completeness continuous improvement
- Annual inventory available internally but not publicly-released
  - Point: updated CAMD EGUs, TRI and SLTs-submitted
  - Fires and mobile sources
  - All other sources are usually carried forward
- Collaborators outside OAQPS
  - EPA Offices/Programs: OTAQ, TRI, ORD, GHGRP, CAMD
  - Non-EPA: USFS, NOAA, BOEMS, international organizations, SLTs!

2017 NEI Timeline



- Proposed 2017 NEI timeline:
  - Data submitted within 12 months by SLTs
  - Public release within 27 months (merges S/L/T and EPA data)
  - Public comments
  - Use in air quality modeling 24-36 months
  - Subsequent versions typical in previous NEIs ideally not needed for the 2017 NEI

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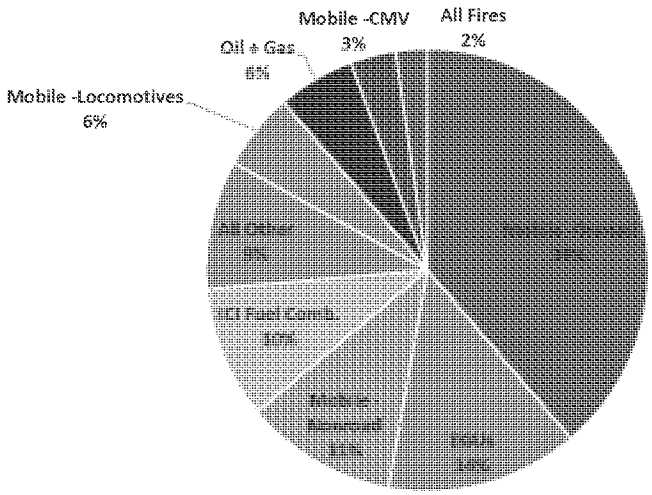
Keep, useful to illustrate how the comprehensive NEI fits in the calendar

How We Help SLTs Calculate and Submit Emissions

- NEI Development Plan, instructions, trainings w/ webinars
- Nonpoint: EPA methods and 30+ tools
  - County-specific estimates using state-of-science methods
  - SLT collaboration to improve methods
  - For SLT use for submission and as fallback for EPA
- Mobile: models and inputs w/ OTAQ
  - We provide vehicle miles traveled, fuels, speed distributions, aircraft LTOs, CMV port/underway activity
- Satellite-based fire emissions w/ ORD + US Forest Service methods, SLT inputs
- Option to "accept EPA data" by emissions sector (for all but point sources)
- Biannual International Emissions Inventory Conference – 1.5 days trainings, 3 days sessions and workgroup meetings

Contribution to total 2014 NEI: NOX



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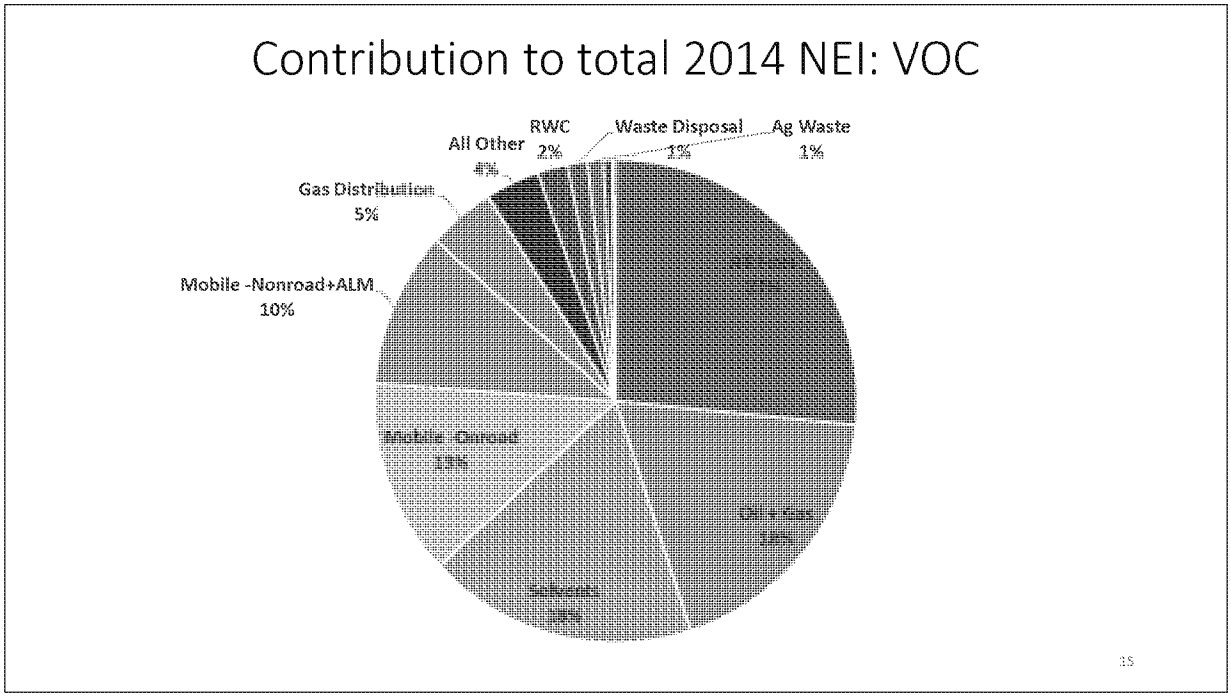
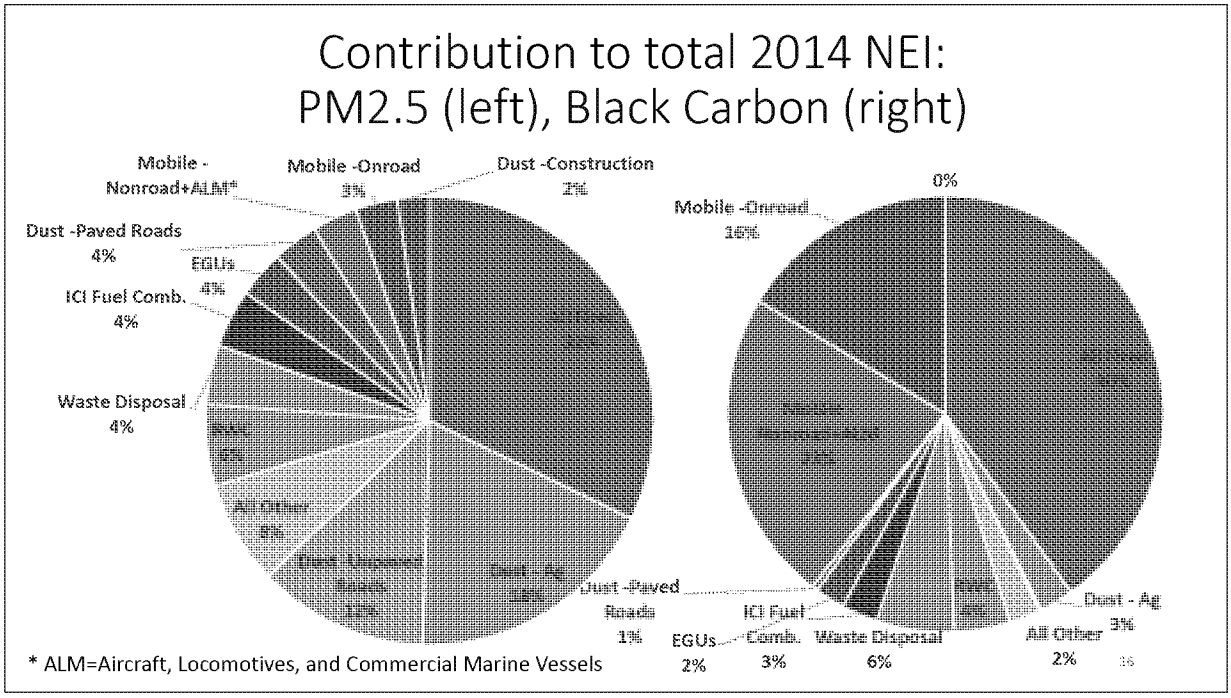
"Other" is sources like: res NG heating, cement manuf, other Ips, aircraft, open burning

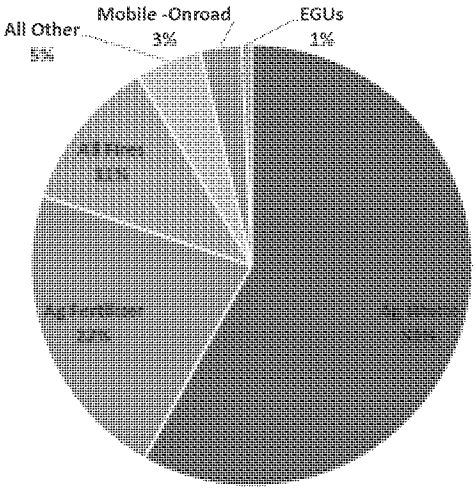


Other: backyard BBQs, Ind processes like pulp and paper, chem manuf



"Other": Comm Cooking, Backyard BBQs, Ips like mining, pulp and paper, metal production

Contribution to total 2014 NEI: NH3



Other: res NG heating, waste disposal, IP manufacturing, RWC

Improvements in the 2014 NEI

- Oil and gas production and exploration: better inputs and methods, updated GHG Reporting Program data (OAP)
- Residential wood combustion & solvents: better inputs and methods
- Commercial marine vessels: "bottom up" inventory method
- Aircraft estimates based on Federal Aviation Administration model and airport-specific modeling
- New version of MOVES model (OTAQ): nonroad equipment emissions with better HAP estimates
- Agricultural NH3 livestock waste/fertilizer: new process-based/"bi-directional flux" models
- Agricultural field burning estimates: better reconciliation with prescribed burning, new method removed false detects, and include range land fire estimates (ORD)
- New categories: composting and backyard charcoal grilling
- Emissions Inventory System (EIS): Improved SLT submittal and QA procedures, transparency via new nonpoint survey
- Increased engagement with SLTs on Nonpoint inventory development created a more efficient process and resource allocation for EPA and SLTs

Oil and gas production and exploration: More state/local input data, improved source characterization (e.g., gas composition data, conventional vs unconventional production) and speciation data
Residential wood combustion:
Improved appliance allocations regionally and to counties
Improved characterization of primary vs secondary and recreational burning
Introduction of local-level woodstove certification profiles and burn bans
Commercial marine vessels: based on discrete data points/activity
Agricultural field burning estimates based on point / day-specific data for modeling
Solvents: better point source reconciliation
EIS: NP survey indicated to EPA what SLTs intended to submit, led to more-automated EPA/SLT data reconciliation, more EIS Reports –comparison and feedback
Engagement w/ SLTs: SLTs knew what EPA was prioritizing, progress and methods of NP EPA tools and had a (limited) role in shaping them to suit their needs (NOMAD calls and trainings)

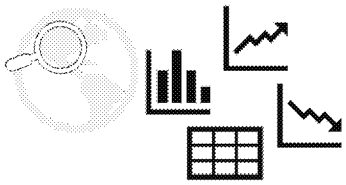
NEI Program New Initiatives for 2017 NEI

- Implementing results of November 2016 LEAN event
  - Streamlined EPA nonpoint tools w/ continuous SLT engagement on development via "NOMAD" (nonpoint) workgroups
  - Implement streamlined approach that will need less future contractor support
  - Goal: One version of the nonpoint inventory
- 2016 Emissions Modeling Platform development (for Regional Haze support) with SLTs and others feeding into 2017 NEI development
- Continued collaboration for data and methods improvements
  - Oil and gas production (SLTs, OAP)
  - Residential wood combustion (SLTs, CEC)
  - Industrial and commercial/institutional fuel combustion (SLTs)
  - Updated MOVES model (primarily nonroad) and inputs (SLTs, CRC, OTAQ)
  - Commercial marine vessels (OTAQ, SLTs, LADCO)
  - Fire emissions factors and PM composition data (ORD, USFS)
  - Agricultural livestock and fertilizer NH_3 (ORD)
  - Estimating emissions from new sources such as agricultural silage (SLTs)

Core NEI Team

- Jennifer Snyder: Nonpoint Overall, including Oil/Gas & Solvents
- Tesh Rao: Fires and Ag Livestock, Black Carbon
- Laurel Driver: Onroad and Nonroad Mobile Sources
- Ron Ryan: Point sources
- Madeleine Strum: CAER, Air Toxics/NATA and Speciation
- Sally Dombrowski: CAER, SLT Support and Training
- Rhonda Thompson: Nonpoint Dust and Ag Fertilizer
- Rich Mason: Team Lead, Residential Wood & Nonpoint ICI Fuel Combustion

2014 NEI Report Story Map



- Reports for previous NEI releases, e.g., 2008, 2011, were stand-alone static documents containing limited emission summaries, though the data was available online.
- New interactive communication tool will allow users to explore the 2014 NEI v2 data released in February 2018 using new user-friendly technology.
- Highly visual tool with graphs, tables, and maps that summarize national and state emission trends and emission profiles for states and counties based on the 2014 NEI v2 data.
  - Users can explore the emissions data and answer basic questions they have about the NEI and emission trends by looking at what the data shows for national, state, and local areas.

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Uses the Agency data analytics software standard 'Qlik'. Some examples of other EPA Qlik applications:
Toxics Release Inventory (OCSPP); Enforcement and Compliance History Online (OECA); OAR OTAQ (Fuels ABT Credit Data).

Appendix

2014 NEI Report Story Map: Additional Details

- The Report distills a considerable amount of data detail inherent to the NEI and provides emission summaries for the criteria pollutants and 5 select HAPs.
  - CAP-related emissions: CO, NH3, NOx, Pb, PM (PM_{10}, $PM_{2.5}$, and black carbon), SO2, VOC
  - HAPs (5): acrolein, benzene, chromium VI, ethylene oxide, formaldehyde

    These 5 are examples of emissions which contribute to national or regional levels of cancer or non-cancer health risks based on the National Air Toxics Assessment (NATA)
- The Report is not a query tool for accessing all details of the entire 2014 NEI data. NEI data access query tools and detailed data files remain available on the EPA NEI program website.
- Anticipate a broad user audience including NEI stakeholders, i.e., data contributors, developers, and users; and the public, e.g., general browsers, air quality savvy neighbors, high-school and college students.
- A tour of the draft Report was provided to the Regional Office/OAQPS emission inventory coordination group.
- Next step: Release…. pending approval and post on the NEI program website.